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Preface

The Institute for Human Resource Professionals (IHRP) and Ministry of Manpower (MOM) jointly commissioned Willis Towers Watson in 2019 to study the impact of technology on the Human Resource (HR) sector in Singapore, specifically on changes to jobs and skills in the sector. The study focused on a three to five year timeframe to analyse the impact in detail and identify actions to help shape the future of the HR sector in Singapore.

The study aimed to answer three key questions – what technologies will impact HR in the future, how jobs will change i.e. jobs and tasks that will be displaced, those that will be augmented, and new jobs and tasks that will emerge, and which skills will be critical to perform these roles, particularly the technology-related skills that HR professionals will require to perform jobs of the future.

The study concluded that technology will disrupt the current state of HR considerably and provide HR the opportunity to deliver higher value to the business by leading the strategic people agenda while improving HR service delivery. In the subsequent chapters we will explore the key technology trends impacting HR, and the impact of these on the HR operating model, jobs and skills.



1. Executive Summary

This report seeks to address the following:



Technology trends shaping the Human Resource (HR) sector



Impact of technology on ways of working in HR



Evolving HR operating model



Impact of technology on HR tasks and jobs



Impact of technology on future skills for HR professionals



Expectations from HR in the future

As the Fourth Industrial Revolution (4IR) unfolds, the impact of technology on the way we work will be unprecedented in scale, speed and scope. Technologies such as artificial intelligence, robotics and the Internet of Things will alter business models and jobs in every industry.

Technology is already changing the way we work through remote access, virtual meetings and online collaboration tools. The recent business continuity planning measures taken by organisations in response to the COVID-19 outbreak have accelerated the use of these mechanisms. The continued use of remote working is driving a mindset shift as well as innovation in areas of employee engagement, productivity, and reconfiguration of workflows.

With COVID-19 impacting business operations and profitability, more organisations are beginning to adopt technology to reinvent jobs and tasks, as well as use a wider talent ecosystem to deliver work in a cost-effective way. Jobs are also being redesigned to deliver higher value-add to manage economic pressures, demographic shifts and workforce expectations for purposeful work.

In Singapore, these challenges are pronounced due to an ageing population. Additionally, Singapore's multi-generational and diverse workforce has differing levels of exposure to technology. As the country evolves to stay competitive and reduce reliance on labour-intensive work, businesses will also need to find effective and sustainable ways to build workforce capabilities. The unique, long-standing tripartite arrangement among unions, employers and the Government further helps to develop and promote initiatives that build future-ready skills in the local workforce.

This presents a unique opportunity for the HR function to redefine how work can and should be done and play its part to address businesses' evolving workforce and skills needs.



Technology trends shaping HR

Our research, which includes more than 60 interviews and 230 survey responses from business leaders and HR professionals, as well as industry scans across four countries [1], has identified three key technology trends at the heart of HR transformation.

Trend 1: Advent of intelligent automation

Service delivery and transaction processing are increasingly being streamlined through **intelligent automation**. Our survey found that intelligent automation solutions will be amongst the top five changes impacting HR in the next three years.

Intelligent automation covers a spectrum of solutions: from Robotic Process Automation (RPA), which allows for large scale error-free processing of routine tasks, to Artificial Intelligence (AI) and Machine Learning (ML), which are automating complex cognitive processes like CV screening.

Al is also increasingly being applied in the form of **social robotics** (e.g. chatbots) for first-level query resolution. The advent of intelligent automation enables HR to have more bandwidth to focus on strategic activities such as workforce analytics and building future capabilities. This unlocks the potential of the workforce to improve future performance and productivity.

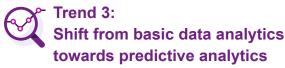


There is an increasing demand for organisations to provide consumer-grade employee experiences.

Exposure to high quality consumer applications in everyday lives has raised employees' expectations of a high quality and seamless experience as they navigate the workplace. HR needs to design and deliver an employee experience ecosystem with services and tools that enhance engagement, productivity, and positively impacts business outcomes.

Mobile applications are already widely used to make performance management, learning and development and onboarding processes more personalised and seamless.

Going forward, HR professionals will need to embrace innovative service delivery approaches and platforms for employee engagement initiatives, such as peer-to-peer recognition, collaboration platforms, interactive applications and self-service models.



and modelling

Data analytics is evolving at a rapid pace due to the exponential growth in data collection resulting from the deployment of technology-enabled platforms.

In our survey, this emerged as the most important area impacting HR in the next three years. Organisations have access to large amounts of real-time data, as well as increasingly sophisticated analytical capabilities. This is driving the use of predictive analytics and modelling as well as analysis of intangible metrics such as organisation branding through analysis of social media, talent sentiment analysis and organisational network analysis. HR should find ways to effectively harness this data to proactively mitigate talent risks, influence business decisions and investments on workforce capability building, performance and productivity to enhance business outcomes.

[1] The industry scan was conducted across US, UK, Sweden and Singapore.

The large amounts of sensitive employee data being collected increases the importance of **data security**, as well as **governance** mechanisms. As the custodian of employee data, HR is being tasked to evaluate ethical considerations behind employee data collection and usage.

These three technology trends are enabled by the prevalence of **cloud-based platforms**, which allow secure storage of and remote access to large quantities of data and applications. Such data is collected, stored, processed and analysed in real time, enabled by better internet connectivity and computational power.

Impact of technology trends on ways of working in HR

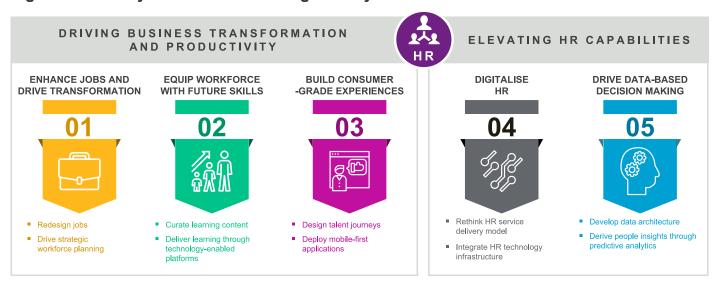
As articulated in Willis Towers Watson's (WTW) global study with the World Economic Forum on "Shaping People Strategies in the Fourth Industrial Revolution [2]", these technology trends will lead to a re-invention of HR's role in the future, to one that drives business transformation and productivity. This will involve

continuous investment to enhance jobs, encourage continuous learning and reskilling, and strategic workforce planning and workforce transformation using advanced and predictive analytics. HR will redesign jobs to enable companies to tap into more diverse talent groups, including contingent workers, older workers and those with special needs. Additionally, HR must leverage technology across talent processes to better reach out to a diverse workforce and deliver a more personalised employee experience.

HR has to elevate its capabilities and value-add through technology integration, for better data-driven decision making. In particular, the ability to create data linkages across talent and business metrics will provide greater insights that support strategic workforce planning, and objective approaches to identify and retain the best talent for the organisation. This helps eliminate other inherent biases and creates a diverse and skilled workforce. Greater use of intelligent automation and predictive analytics will also support data-driven talent decisions and enable automated service delivery.

These key themes that will transform the way HR will work in future are summarised in Figure 1.

Figure 1: Five key themes transforming the way HR will work in future



^[2] HR4.0: Shaping People Strategies in the Fourth Industrial Revolution, World Economic Forum, 2019

1. Executive Summary

The key changes in Figure 1 are broad-based i.e. they impact industries and organisations of different sizes and stages of growth. The magnitude and pace of change for each organisation depends on the complexity of operations (size, number of countries that the organisation operates in, etc.) and the maturity of its HR function.

In organisations with mature HR functions, the emphasis will be on reviewing the work architecture (i.e. critical business processes and the constituent jobs) to optimise human-machine combinations for the business. This requires job redesign, creation of new jobs with potentially higher skill requirements and subsequent strategic workforce planning and reskilling to close skill gaps.

Organisations with less mature HR functions are also beginning to automate routine tasks (e.g. through RPA) to enhance jobs and improve employee experience. In addition, the HR team is expected to improve the efficiency and effectiveness of HR services (e.g. benefits administration) by using off-the-shelf technology solutions.

The evolving HR operating model

The technology forces described above have far-reaching implications for the HR operating model and the way HR departments are structured.

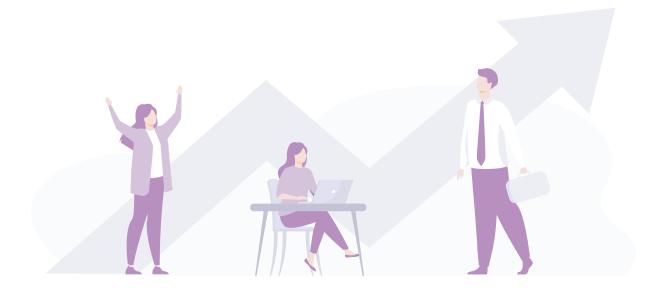
While all functional areas within the operating model will evolve, specialised HR functions – Centres of Excellence (COEs) will see the greatest structural change.

Traditionally, COEs have tended to work within their silos. This trend is changing with more COE resources shifting to "go-to-market" type of roles or operating as multi-skilled resources that can be pulled into issue-based "taskforces" as needed.

In the future, COEs will focus on developing increasingly personalised and tech-enabled offerings in different functional areas, while agile resource pools comprising different HR specialisations will be deployed to develop solutions for multi-dimensional talent issues.

For example, addressing "productivity and agility" will require a team with expertise in both job redesign to augment job tasks and learning in order to identify the required capabilities and training. Rewards capabilities will be needed to develop the framework to compensate the enhanced job accurately, and organisation development expertise will be needed for change management.

These teams will work more closely across stakeholder groups both inside and outside HR to design holistic solutions suited to technology-driven deployment. They will need strong problem-solving capabilities, ability to think from an employee's perspective and be skilled in multiple HR specialisations.



Impact of technology on HR tasks and jobs

Using Willis Towers Watson's Reinventing Jobs methodology [3], the study broke down jobs into tasks to analyse the impact of technology on each task hence identifying the extent to which each job defined in the Skills Framework for HR [4] will be impacted by technology. The impact ranged from tasks being augmented to being fully replaced by automation.

This is in line with recent research related to impact of automation – with a shift from whole job to task automation ^[5]. The jobs were then categorised as being impacted at a high, medium or low level based on extent of automation, impact of technology on job scope and impact of technology on skills. In addition, the study also identified new tasks arising from technology advancements. This analysis is summarised in Figure 2 below.

Most of the 27 jobs that we analysed will see significant changes to the tasks within each job, due to the availability of technology-enabled solutions.

Eight jobs will be impacted at a high level due to technology. These jobs are at the Associate and Executive levels. Many of their current tasks are administrative in nature and therefore susceptible to automation and potential displacement, with advances in RPA, ML and social robotics. HR professionals in these roles need to upskill to deliver higher value work, in order to stay relevant in the future.

Another 16 jobs will experience a medium level of impact. These jobs are at Manager and Head levels and will be augmented by technology. These jobs will require skills to apply high quality, technology-enabled service delivery solutions and data analytics to support more strategic functions, such as planning for and building future capabilities and delivering better talent experiences.

Finally, three jobs will experience low level of impact. These are: Head of Talent Management, HRBP and Manager of Organisation Development. These jobs require few new technology-related skills and will experience minimal automation of tasks. However, the scope of the job will change to support the needs of a wider talent ecosystem, deeper engagement with the business to drive business transformation and organisation change.

Figure 2: Impact of technology on 27 jobs

	Performance and Rewards (P&R)	Talent Management (TM)	HR Business Partner (HRBP)	Employee Exp. and Relations (EER)	Ops and Technology (Ops & Tech)	Organisation Development (OD)	Learning (L)	∰ ∬∭∭ Talent Attraction (TA)
HIGH	Executive, P&R Associate, P&R	Associate, TM		Executive, EER Associate, EER	Executive / Associate, Ops & Tech	Associat	e, L&OD	Associate, TA
MEDIUM	Head, P&R Manager, P&R	Manager, TM Executive, TM	Manager, HRBP	Head, EER Manager, EER	Head, Ops & Tech Manager, Ops & Tech		L&OD e, L&OD Manager, Learning	Head, TA Manager, TA Executive, TA
2				Chief Human Ro	esources Officer			
row		Head, TM	Head, HRBP			Manag	er, OD	

^[3] Reinventing Jobs: A four-Step Approach for Applying Automation to Work, by Ravin Jesuthasan and John Boudreau

^[5] The Future of Employment, Carl Benedikt Frey and Michael A. Osborne, 2013

^[4] The Skills Framework for HR which covers 21 jobs across seven functional tracks is the starting point for the jobs considered in this study. The 21 jobs were further broken down and additional jobs were considered to study the impact on the 27 jobs across the HR sector.

1. Executive Summary

For roles highly impacted by technology, the study identified potential job adjacencies through an analysis of skills overlaps and recent transition trends. To transit into these roles, upskilling will be imperative.

Technology and key HR trends will also create new opportunities in the form of new or emerging roles ^[6]. Some of these roles are highly **specialised** such as:

- HR Data Analyst
- Learning Designer
- Employee Onboarding Specialist

The role of HR Data Analyst is emerging as organisations build their capabilities in this area. These roles combine people analytics and data science capabilities. In the long term, people analytics will be a key skill required by all roles in HR rather than being a dedicated role. The niche data science capability may get consolidated into a specialised role / function across the organisation. Similarly, roles such as Learning Designer and Employee Onboarding Specialist are expected to emerge to drive learning journeys and employee experience design, as more emphasis is placed on a customised employee experience and continuous upskilling.

Other emerging roles are **cross-functional** in nature, such as:

- People Strategist
- Head of Talent Enablement

Increasingly, cross functional roles will emerge within the HR function to enhance employee experience and deliver integrated and holistic solutions. The People Strategist will partner with people managers to ensure that all processes across the talent lifecycle are in alignment with the organisation culture. The role will also solve talent issues by using talent metrics to drive effective business outcomes. The Head of Talent Enablement will drive all aspects of talent strategy and enablement, including seamless execution of talent lifecycle processes, through use of technology. The role will also shape the design and deliver of strategic talent programmes. Additionally, the role will work closely with the business to drive productivity and engagement of the workforce and link these to business outcomes.

Impact of technology on future skills for HR professionals

New skills are also required to carry out these enhanced jobs. HR professionals need to adopt a mindset of continuous learning, both to upskill themselves and to drive skills upgrading across the organisation. Cross-functional skills are increasingly important as most HR solutions have adjacencies and dependencies with others. This is also reflected in Josh Bersin's work on the "full-stack HR professional" [7]. Our research identified 8 critical cross-functional skills applicable across all 27 HR jobs.



Ability to adopt HR Technology will be critical to enable the delivery of seamless talent experiences and to raise the quality of employee services. HR professionals will need skills in People Analytics (e.g. predictive modelling) to derive key insights, and use Data-Driven Story Telling to make a business case for talent related decisions.



For HR to drive business transformation, skills in Organisation Behaviour and Change Management, Relationships and Communication, and building an Agile Mindset within the organisation will be critical to influence behaviour and culture change.



Business and Financial Acumen and Progressive and Inclusive Workforce Policy Implementation will be required for the development of industry and business specific talent strategies.

In addition to these cross-functional skills, future rolespecific skills will be discussed in Section 4 of this report.

In conclusion

The HR sector in Singapore is in a unique position today to grow its capabilities to drive business transformation by:



Redesigning jobs to deliver higher value and focusing on strategic workforce planning



Driving ongoing upskilling and reskilling of the workforce



Designing and delivering a high-quality talent experience, to enable higher performance and productivity outcomes



Embracing automation to enable a greater focus on strategic functions, while emphasising the "human" elements of HR work



Leveraging analytics to provide people insights as a strategic partner to business

This will allow HR in Singapore to positively impact business outcomes both locally and across the region.

To achieve the above, upskilling and reskilling across the HR function is necessary. This requires organisations to invest in HR, and for HR professionals to take ownership of their professional development.

In the longer term beyond the next three years, our study has identified five key ways in which the expectations from HR will continue to evolve:



Technology improvements will continue to present new opportunities for automation across businesses. Some of these opportunities may potentially lead to mass displacement of less skilled employees. This development, together

with increasing human-machine combinations, makes constant organisation-wide re-skilling and upskilling an imperative.



HR will need to address the ethical dilemma between commercial benefits and the social impact of automation decisions. Additionally, HR will need to consider ethics in relation to personal data and privacy. HR will be expected to guide the leadership through their strategic perspective and strong influencing skills to balance conflicting interests on such ethical decisions.



As businesses continue to drive efficiency and productivity through use of an extended talent ecosystem beyond traditional employees, HR professionals need to be talent advocates within their organisations. They need to ensure that the right kind of rewards, health and wellness programmes, learning opportunities and talent experience are made available for all types of workers.



As highly skilled talent increasingly seeks out purpose-driven work, HR will need to ensure that the organisation can attract, inspire and retain such talent. HR will need to coach business leaders to articulate the organisation's purpose and contribution to society. HR will also need to guide the business to re-design jobs and articulate how the work delivered by people is meaningful, aligns with organisation's purpose and contributes to the society.



With increased prevalence of remote work and the use of talents outside the organisation, HR will also need to strengthen its role as the custodian of the values that underpin the culture of the organisation. HR professionals of the future will play a key role in driving a culture that aligns with business strategy, organisation values and new ways of working.



2. Methodology

How did we approach the study?

A three-phase methodology utilising both quantitative and qualitative data was used to study the impact of technology on the jobs and skills in the Human Resource (HR) sector in Singapore (see Figure 3).

The HR roles included in the scope of our research study were referenced per the Skills Framework for HR ^[8], developed in 2018 for existing HR jobs in Singapore.

In total, 27 jobs across seven HR functions were analysed (see Figure 4) based on WTW's Reinventing Jobs approach. This approach is described in detail in Phase 2.

Figure 3: Overview of the research methodology

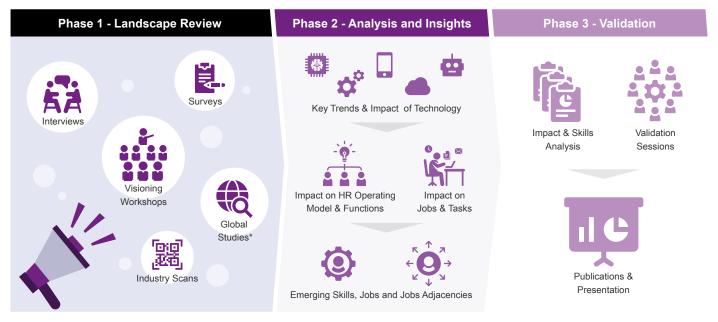


Figure 4: Number of jobs covered in research study

1	CHRO	1 job
2	Operations and Technology	3 jobs
3	HR Business Partner	2 jobs
4	Talent Attraction	4 jobs
5	Talent Management	4 jobs
6	Employee Experience and Relations	4 jobs
7	Learning and Organisation Development	5 jobs
8	Performance and Rewards	4 jobs

27_{Jobs}

were identified to analyse the impact of technology

^[8] The Skills Framework for HR is a SkillsFuture initiative developed to promote skills mastery and lifelong learning for Human Resource (HR) professionals in Singapore. This was jointly developed by SkillsFuture Singapore (SSG), Workforce Singapore (WSG), Ministry of Manpower (MOM), supported by the Institute for Human Resource Professionals (IHRP).

Phase 1: Landscape review

The landscape review included interviews and visioning workshops with business and HR leaders, industry scans across four countries, reviews of global research as well as external resources, and surveys with business leaders and HR professionals.



Interviews and visioning workshops

We conducted a series of workshops to articulate the vision for the future of HR and explore the trends in technology adoption in Singapore over the next three years and beyond. Through the interviews, we further explored the impact of technology on HR functions, current challenges and future priorities in technology adoption.

	Engagements	Stakeholders
1	5 Visioning workshops (37 participants)	Business leaders HR leaders
2	30 one-on-one interviews	Board membersBusiness leadersHR leaders
3	1 Future of HR workshop (8 participants)	HR leaders



In addition to Singapore, three other reference countries, the US, UK and Sweden, were included in the HR industry landscape scan. This scan was conducted to provide insights on the potential evolution

and future technology adoption for HR in Singapore. These countries were selected as they had best-inclass employment practices. In particular, the reference countries ranked favourably in the Global Talent Competitiveness Index 2020 [9]. We also identified emerging trends in HR through analysis of over 2.5 million professional profiles, more than 180,000 job postings and 2.5 million job transitions across Singapore and the reference countries. This combined dataset was used to analyse emerging jobs, skills and job adjacencies. These methodologies will be described in Phase 2 of the study.



Insights from global studies

We referenced two global studies conducted by Willis Towers Watson in 2019. The first, in partnership with the World Economic Forum [10], examined how HR is developing people strategies in the Fourth Industrial Revolution. The findings from this study were used to validate our key themes that impact the HR in Singapore as well as specific emerging roles for HR in future. The second, conducted in collaboration with the Society for Human Resource Management [11], explored the changing role of the Chief People Officer. The outcomes from this study were used to corroborate the impact of technology and future expectations for the CHRO role in Singapore.



Surveys

Two surveys were conducted to deep dive and seek insights on the initial findings from the interviews and visioning workshops. We asked more than 230 business leaders and HR professionals from Singapore for their views on the type of technologies impacting HR, their impact on HR functions, automation potential of HR processes, as well as new skills required.

 ^[9] The Global Talent Competitiveness Index 2020 Global Talent in the Age of Artificial Intelligence

^{[11] (}SHRM's Executive Network, HR People + Strategy Report - The Future Chief People Officer. 2019)

^{[10] (}World Economic Forum, Saudi Aramco, Unilever and Willis Towers Watson, 2019)

Phase 2: Analysis and Insights

The analysis and insights phase included three keys steps to ascertain the impact of technology at a job level. Firstly, review of industry scans across four countries to identify emerging jobs and skills in HR, secondly, application of the Reinventing Jobs methodology to assess the impact of technology on HR jobs as well as developing the criteria for identifying the level of impact of the jobs. Lastly, analysis of job movements information and overlap of skills to identify the job adjacencies within and outside HR.

Identifying emerging jobs and skills in HR

To identify emerging jobs in HR not captured in the current Skills Framework for HR, we analysed HR profiles from professional networking sites in Singapore and the reference countries (described in the Industry Scans in Phase 1), as well as HR job postings in these countries in the last six months. We identified eight such jobs through this process. Figure 5 below describes the approach in detail.

For emerging skills, we analysed a database of 2.5 million HR professional profiles from Singapore and the reference countries, to identify skills that have only appeared in profiles within the last six months. This approach is explained in the Figure 6 below.

Figure 5: Methodology for identifying emerging jobs

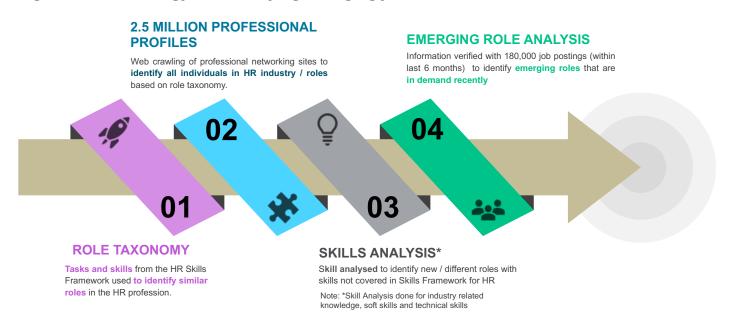
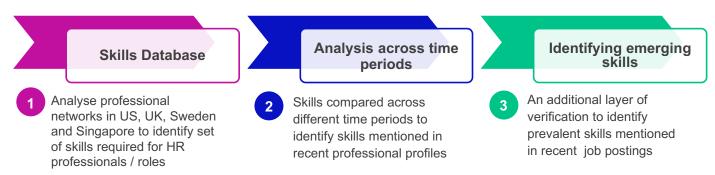


Figure 6: Methodology for identifying emerging skills



2. Methodology

Identifying emerging jobs and skills in HR

Part 1: Impact and skills analysis

We assessed existing jobs using WTW's Reinventing Jobs methodology, which follows the four steps outlined in Figure 7 below.



Step 1. Automation potential

Referencing the Skills Framework for HR, we deconstructed each job into tasks and evaluated each task based on the following three dimensions:

- Repetitive vs. Variable
- Independent vs. Interactive
- Physical vs. Mental

Tasks that are particularly suited for automation within the time period of our study tend to be repetitive in nature, typically performed independently with mostly manual or simple mental capability required.



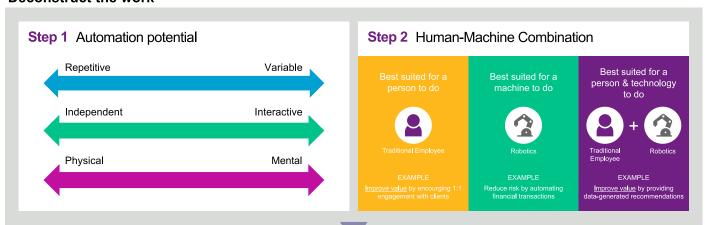
Step 2. Human-machine combination

We then categorised the tasks into three groups based on the expected outcome related to risk mitigation or enhancing performance:

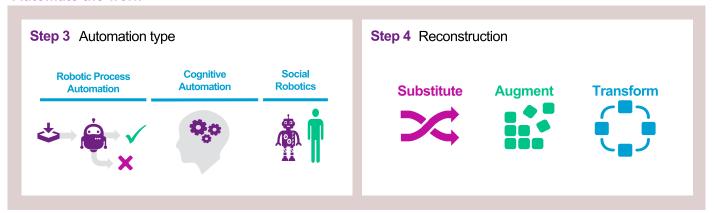
- tasks that could be fully performed using technology
- tasks that could be performed by a combination of technology and humans
- tasks that are likely to be fully performed by humans

Figure 7: Willis Towers Watson's Reinventing Jobs methodology to identify impact of automation / technology on roles

Deconstruct the work



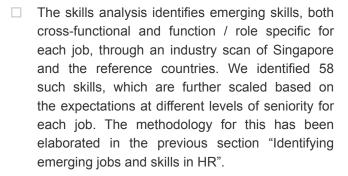
Automate the work





Step 3. Automation type

For the first two categories of tasks (viz. tasks that could be fully performed using technology and those performed by a combination of technology and humans), we used insights from the landscape review to identify the relevant type of technology involved.





Step 4: Reconstruction

The tasks, performed by a combination of technology and humans and tasks fully performed by humans, were analysed to identify the new skills that may be needed in the future, as well as if there any new tasks that would be required as a result of the technology enabled tasks.

This approach was used to conduct the impact and skills analysis for each job.

☐ The impact analysis highlights **what** the future expectations of the job will be, and **how** the job will be performed in future i.e. the type of technology that will be used to substitute, augment or transform the job.

Part 2: Identifying level of impact

The level of technology impact on the 27 jobs was assessed based on three criteria: extent of automation, impact of technology on job scope and the impact of technology on skills. The jobs were scored "high", "medium" or "low" for each criterion (Figure 8).

Three out of the 27 jobs were found to be at low level of impact, 16 jobs were assessed at medium level of impact and the remaining eight were at high level of impact.

The table below defines the level of technology impact and characteristics of the jobs due to technology.

Figure 8: Criteria to determine technology impact on HR jobs

			3 jobs	16 jobs	8 jobs
-	Criteria	Definition	Low	Medium	High
	Extent of automation	Extent of automation of tasks	Minimal automation	Moderate automation / augmentation	High automation with risk of displacement
0000	Impact of technology on job scope	Changes to job scope as a result of technology	Minimal change to existing job scope	Modified / enhanced job scope	New job scope / changed job
٠٠٠	Impact of technology on skills*	Additional new / enhanced technology-related skills* required	Low / minimal new technology-related skills required	Modified / enhanced technology-related skills required	New technology- related skills required

Note: *This includes additional technology-related skills that are not covered in IHRP Body of Competencies and Skills Framework for HR

Jobs with high level of impact

The impact

These jobs are at high risk of displacement or jobs that have a significantly new / changed job scope that require new technology-related skills.

Characteristics of jobs

These jobs are largely operational in nature with high volume of transactional processing and administrative tasks. For example, tasks such as first line support and query handling, and other such variable and cognitive tasks that can be automated. A combination of RPA, chatbots and AI / ML can be used to automate the above tasks.

An example: Associate, Learning and Organisation Development

Today, the role includes maintenance of learning databases, coordination of training, collection of data and feedback etc. These tasks will be substituted by technology such as mobile applications, AI etc. In future, the role will need to support the evaluation and testing of platforms for communication, learning etc. and assess the effectiveness of learning programmes linked to the business metrics. This requires new skills in User Experience / User Interface Design, Omnichannel Communication, People Analytics etc.

Jobs with medium level of impact

The impact

These jobs are augmented by technology, have an enhanced / modified job scope and require enhanced technology -related skills.

Characteristics of jobs

These jobs have a balance of strategic and operational elements. Tasks will require a moderate to high level of cognitive capability, human judgment, relationship building, and communication with stakeholders. Specific processes which have a defined process flow can be delivered through technology. The role will need to derive insights from the data generated from these processes.

An example: Manager, Talent Attraction

Today, the role includes tasks such as execution of recruitment plans through sourcing, screening, assessments, onboarding etc. Some of these tasks will be increasingly augmented by technology solutions such as AI / ML for initial sourcing, screening and assessments and AI / chatbots to enhance onboarding and candidate experience.

In future, the role will work closely with business to develop a Talent Value Proposition (TVP) for multiple talent personas. Identification of talent will become more sophisticated due to competitive intelligence and market research. Also, the role will focus on delivering a seamless candidate experience through use of technology solutions. This requires skills related to Talent Persona Design, Data-led Talent Acquisition and Candidate Experience Design.

Jobs with low level of impact

The impact

These jobs will not experience significant change to their existing job scope and will not require many new technology-related skills.

Characteristics of jobs

Such roles are largely strategic in nature or rely significantly on relationship-building skills. For example, tasks such as influencing business leaders or formulation of talent strategies do not require deep technology related skills, but instead a broader understanding of technology and talent trends.

An example: Head, HR Business Partner

HRBPs guide business leaders on workforce strategy, develop tailored talent programmes and lead implementation of these programmes for the business. Going forward, the role will drive business transformation through job redesign and strategic workforce planning and develop personalised programmes for different talent across businesses. This will require new skills in the areas of strategic business and HR advisory, work architecture and job redesign, as well as strong data analysis skills. It will however require relatively less technology related skills.

Part 3: Identifying job adjacencies within and outside HR

For HR jobs highly impacted by technology, we identified potential job adjacencies within and outside HR:

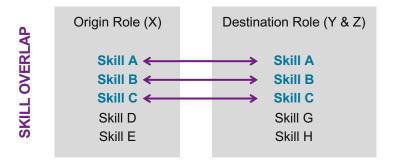
Step 1

We gathered data from web-based sources such as job boards, professional networking sites and industry specific portals across Singapore and the reference countries to develop a database of 2.5 million datapoints

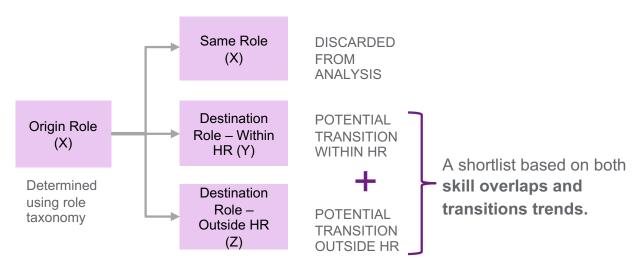
and job movements by HR professionals. We used natural language processing and keyword extraction techniques to identify the skillsets required in each role, and to map the skill overlaps of the origin role with the potential destination roles. We conducted a pairwise comparison of skill overlaps across origin and destination roles, both within HR and into other function, to identify the possible movements for origin roles. We compared these possible movements with actual transition trends for origin roles to verify the most prevalent destinations roles and developed a shortlist of the top five destination roles. This is explained in Figure 9 below.

Figure 9: Step 1 - initial analysis to identify top five prevalent destination roles

A. MAPPED SKILL OVERLAPS



B. ANALYSING TRANSITION TRENDS



2. Methodology

Step 2

We further refined the list of potential transitions by evaluating the feasibility of the proposed movements. We assessed the percentage of skills overlap, whether the new skills required for the destination role would be prohibitively complex and whether the destination role is also expected to be displaced by automation [12]. Through this process, we identified the top three most feasible job adjacencies within and outside HR for each role expected to be highly impacted by technology. An example of this has been illustrated below in Figure 10.

Phase 3: Validation

The findings from this study were validated via seven validation sessions with 60 experts from the HR function, as well as CHROs from local and global organisations of various sizes and industries.

Through this structured, multi-pronged methodology, we have identified the impact of technology on the HR operating model, HR functions and the jobs and skills within these functions. These findings are detailed in the next section of the report.

Figure 10: Sample for job adjacency

Sample for Job Adjacency - Executive, Employee Experience & Relations

OUTPUT FROM STEP 1

Top potential adjacencies or DESTINATION roles for the Executive, Employee Experience & Relations (EER) are as follows (the titles shown are the most prevalent titles):

- Account Management Executive / Assistant Account
 Management Manager
- 2. Customer Service Associate / Executive
- 3. Project Coordinator / Assistant Programme Manager
- 4. Sales / BD Specialist / Executive
- 5. HR Consultant / Analyst

OUTPUT FROM STEP 2

SAMPLE: SKILLS OVERLAP WITH **ONE OF THE TOP THREE ROLES:** ACCOUNT MANAGEMENT EXECUTIVE

ORIGIN ROLE (Exec, EER)	DESTINATION ROLE (Account Mgmt. Executive)
Customer Service	Customer Service
Data Analysis	Data Analysis
Employee Engagement	Social Media
Employee Training	Training
Event Management	Event Management
Negotiation	Negotiation
Onboarding	CRM Systems
Problem Solving	Problem Solving
Project Management	Project Management
Relationship Building / Networking	Communication
Time Management	Time Management
Selling	Sales
Employee Relations	Market Research

LEGEND:

Overlapping Skills

^[12] Reinventing Jobs: A 4 Step Approach for Applying Automation to Work, by Ravin Jesuthasan and John W. Boudreau; The 3 Ways Work Can Be Automated, by Ravin Jesuthasan, George Zarkadakis, Tracey Malcolm.



3. Overall Findings

Global trends impacting the future of work

The Fourth Industrial Revolution (4IR) is characterised by rapid technological change and the blurring of boundaries between the physical and digital spheres. Intelligent automation such as artificial intelligence (AI) and machine learning (ML), data science, robotics, and blockchain are driving this transformation. Technology is already enabling the automation of manual and transaction processing tasks, allowing humans to deliver higher value work to enhance productivity and improve performance. Moving forward, more of such technologies are likely to be applied in combination in order to automate more complex and cognitive tasks, magnifying their impact. For example, a combination of AI, data-mining algorithms and AI-powered chatbots are enabling real-time and personalised customer service. These developments are expected to continue at an exponential rate, creating new business opportunities, service delivery models and jobs.

WTW's HR 4.0 study with the World Economic Forum [13] confirms these trends, highlighting the impact of the changing nature of jobs and tasks on work ecosystems. Automation of routine processes, and increased use of data analytics has led to a rising demand for higher-level skills. With the shelf-life of technical skills being reduced, there is a need to constantly upskill and reskill talent for continued relevance. The demand for talent with the right skills is also driving the use of a broader talent ecosystem of non-employee talent, such as flexible and gig workers, which has been facilitated by the rise of technology platforms and connectivity. Going-forward, the impact of COVID-19 will accelerate these trends, as more employees continue to work remotely [14], and organisations increase the use of contingent workers to reduce costs and augment staff. The pandemic has long-term implications on the future of work and expectations of HR. These have been covered in detail in the Afterword.

Trends impacting Singapore and workforce implications

As a hub for finance, technology and innovation, Singapore is at the forefront of changes that characterise the 4IR. The Singapore Government is proactively driving industry and workforce transformation across sectors by deepening linkages between complementary industries. This industry transformation must be supported by appropriate manpower strategies to plan for, develop and deploy human capital effectively.

Like other developed economies, Singapore is experiencing a slowdown in resident workforce growth and an ageing population. This requires companies to transform their businesses to be manpower lean. Technology adoption offers many possibilities on this front.

As automation increases in prevalence and jobs are redesigned to add higher value, strategic workforce planning and constant upskilling and reskilling will be required to ensure that the workforce has relevant skills. It will present a challenge to a diverse and multigenerational workforce such as Singapore's, where skill gaps could be particularly acute for specific segments of the workforce profile, such as older and lowerskilled workers. Companies must therefore regularly assess the technology readiness of their workforce for technology adoption to be successful. They could also leverage Singapore's unique form of tripartism, to tap on programmes endorsed by businesses, unions and the Government, that develop future-ready skills within the workforce.



Expectations from HR

The trends and workforce implications discussed above are key in driving work transformation in the 4IR. HR is in a unique position to create value for the organisation by leading job redesign and strategic workforce planning. This will enable identification and building of skills for the future. To ensure that employees are ready for this change, HR must also drive organisation-wide transformation initiatives to create a supportive and agile culture. The automation of routine HR service delivery functions will allow HR to focus on these strategic talent aspects of the business. Technology applications and platforms will enable HR to collect, store and develop seamless flow of data. Through use of data analytics, HR can provide better insights and linkages between talent metrics and business outcomes. These technology platforms will also enable the delivery of seamless and personalised HR services and talent experiences.

According to our research, three key technology trends will significantly change the expectations that business stakeholders have from HR.

Trend 1: Advent of intelligent automation

Increasing use of intelligent automation – a spectrum of technology solutions ranging from simple robotic process automation (RPA), to artificial intelligence (AI) and machine learning (ML) – was identified in our survey of business and HR leaders to be among the top five changes impacting HR in Singapore in the next three years.

<u>RPA</u> allows automation of pre-defined processes such as CV screening and shortlisting, new hire onboarding, and administration of monthly payroll and benefits. <u>AI / machine learning-based technologies</u> are being used in data-driven recruitment assessments. <u>Deep learning</u>, a branch of machine learning that trains a computer to learn from large amounts of data, is being applied to analyse tone of voice and sentiment from speech and image data, for screening suitable hires. <u>AI algorithms</u> can analyse employee online activity and emails to assess real-time employee engagement

and suggest appropriate engagement initiatives. <u>Al-powered social robotics</u> (e.g. chatbots) already manage first-level query handling, and have the potential to analyse tone and context, and respond to queries accordingly.

As the use of Al-driven solutions becomes more common, HR needs to be mindful of bias within Al solutions. The workings of Al solutions are sometimes within a "black box" (and hence difficult to understand). It is critical for HR professionals to proactively look for possibilities of bias with regards to gender, age, ethnicity, education and any other factors, as diversity and inclusion considerations become increasingly important to organisations.



Trend 2: Rising expectations of consumergrade employee experience

Sophisticated and personalised consumer experiences in our daily lives have led to similar expectations of a seamless, consumer-grade experience of HR within organisations.

According to our research, mobile applications are one of the top five technologies impacting HR and will enhance the employee experience across the talent lifecycle. Mobile applications have been introduced to manage transactional processes such as job applications, onboarding, managing payroll and benefits. Mobile applications such as enterprise social networks and communication platforms are increasingly replacing emails as the primary means of collaboration and communication in organisations. Mobile applications can proactively nudge employees to provide performance feedback and deliver a system for multi-source performance management. Learning and development applications offer personalised assessment, tracking and monitoring of skills required for the current job, and suggest relevant training content that can be accessed on-demand. Mobile applications are also being used for continuous listening and employee feedback. The insights derived from large amounts of data collected by mobile applications allow organisations to effectively plan, launch and monitor initiatives that lead to improved talent outcomes.

3. Overall Findings



Data analytics has evolved from basic reporting to <u>predictive analytics and modelling</u>, including insights on <u>linkages of talent metrics with business outcomes</u> and <u>analysis of intangibles</u> such as reputation, sentiment etc.

Predictive analytics is transforming recruitment, such as comparison of profiles of potential hires with those of existing employees to identify the best fit for the organisation. HR can also use multiple data sources, such as employee feedback, sentiment analysis, performance, career growth and general engagement information to predict the future performance of an employee. Such analysis allows HR to influence business outcomes through better talent decisions.

Predictive analytics can also help organisations identify and better address skill gaps by recommending personalised development programmes and career pathways. Algorithms can help inform the optimal mix of "building" and "buying" talent by identifying skills that can be built internally (e.g. through training existing employees with adjacent skills) and those that would require external hiring.

Analytics is also being used to predict employee attrition by analysing indicators of flight risk, so that atrisk employees can be proactively managed. By linking various talent metrics such as employee performance or investment in learning to business outcomes, HR can enhance employee productivity and add value to the business.

With increasingly sophisticated ways of capturing and analysing employee data, HR will need to balance between data collection and insights and a potentially worrisome trend of "employee surveillance". HR will also need to be aware of data privacy considerations and ensure ethical use of employee data across the organisation through development of data governance mechanisms.



Impact of technology trends on the way of working in HR

The technology trends have led to the evolution of HR and will continue to shape the future of the function. HR needs to continue to elevate its capabilities, in order to optimise HR service delivery and to drive business transformation.

As these technology trends become more prevalent, the role of HR will be transformed in five key themes as shown in Figure 11. In order to drive business transformation and productivity, HR needs to redesign jobs for greater value-add, plan for future workforce through strategic workforce planning and, effect change management and cultural alignment. As the nature of jobs evolve, HR needs to drive large-scale upskilling and reskilling, and deliver consumer-grade employee experiences across the talent lifecycle. This will be enabled by technology that digitalises HR service delivery and helps to deliver insights that drive data-based decision making.

These five key themes impact the HR function across industries and organisations of different sizes and stages of growth. However, the magnitude and pace of change depends on the complexity of each organisation's operations (size, number of countries that the organisation operates in, etc.) and the maturity of its HR function. In the following pages, each theme and its implication on the HR function is described in greater detail.

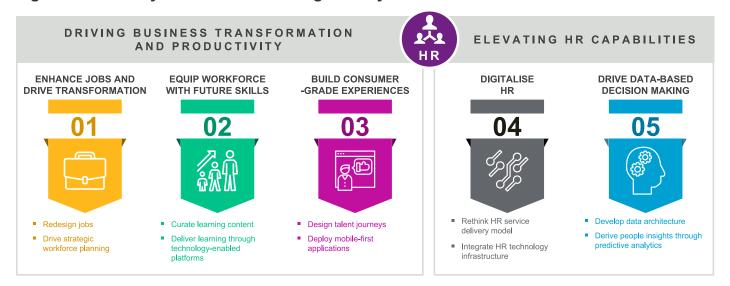


Figure 11: Five key themes transforming the way HR will work in future

Theme 1: Enhance jobs and drive transformation



HR needs to enhance jobs through job redesign, lead strategic workforce planning, and be the internal change champion to drive organisation transformation

Technology is transforming businesses and changing the nature of work. As organisations undergo business transformation, business leaders expect HR to identify optimal human-machine collaborations and redesign jobs for greater value-add to the organisation. In addition, job redesign that uses assistive technology can also allow organisations to tap vulnerable worker segments and overcome the workforce constraints in Singapore. Job redesign was among the top five expectations from HR leaders in our research (see Figure 12).

Business Leaders expect HR to redesign jobs for increased flexibility, collaboration and greater value add to the organisation.

Figure 12: Top expectations from HR leaders

Improving collaboration and information sharing	1
Redesign jobs so that they can only be done by employees with more skills	2
Increasing work flexibility (e.g., scheduled hours to get work done)	3
Pay more for employees with certain skills sets	4
Enabling work to be deployed to other locations	5

Moving forward, HR will be required to collaborate closely with the business to identify pain points and optimise business processes to maximise the benefits from implementing automation that helps to augment jobs. To do so, HR will need to be familiar with key industry and technology trends, and their companies' workforce capabilities. At a broader level, this will take the form of strategic workforce plans and forward-looking strategies for job redesign, reskilling and redeployment of talent, and different employment types. These plans will detail how future workforce and skill needs will be met, either by redeploying and

3. Overall Findings

upskilling existing employees, or through the acquisition of new talents from a diverse pool (e.g. from overseas, mature workers, gig platforms etc). HR should also have a stake in future talent pipelines for the organisation and could do so by proactively engaging policymakers in the Higher Education sector to shape their curriculum.

In order to influence business leaders to implement strategic workforce plans and job redesign strategies, HR will also be expected to develop a strong business case by understanding key industry and business trends, identifying key metrics such as cost savings or enhanced productivity to demonstrate its resultant impact on business outcomes.

To facilitate effective implementation of business transformation strategies, HR must also lead a robust change management process. This expectation from HR professionals was confirmed by the findings of our study. Skills related to managing culture and change emerged as one of the top five future skills for HR in our survey, and in the cross-border industry scan [15] undertaken as part of our study.

A strong organisational culture helps to manage change and makes it more likely for employees to buy into the transformation journey. One enabler for this could be for HR to bring together employees who serve as "Cultural Ambassadors" and collaborate with business leaders to create, develop and embed an agile and progressive culture within the organisation. They can be influencers and enablers of change, bridging the gap between different generations of employees, alternative sources of labour and different perspectives in the workplace.

Business transformation will require new skills and capabilities across the entire organisation Reskilling and upskilling the organisation will be another key focus for HR in the future. This has been addressed in the next theme in greater detail.



Theme 2: Equip workforce with future skills



HR must identify emerging skills and skill gaps to drive re-skilling / upskilling

Rapid technology evolution has drastically reduced the half-life of skills, and will demand that businesses undergo regular, large-scale reskilling efforts. This is reflected in our survey of business leaders where employee upskilling / reskilling was ranked among the top five human capital processes impacted by technology (as shown in Figure 13). As future expectations evolve and jobs are redesigned, HR needs to work with the business to identify future skills that are in line with businesses' transformation plan and develop learning pathways for employees.

Employee Upskilling / Reskilling is among the top four most impacted human capital processes by technology.

Figure 13: Ranking by Business Leaders of the top human capital processes impacted by technology

Business

Leaders

	Leaders
Recruitment	1
Job Design and Organisation Structure	2
Employee Engagement	3
Employee Upskilling / Reskilling	4
Performance Management	5

^[15] The industry scan included analysis of 2.5 million HR jobs across US, UK, Sweden and Singapore.

While the demand for technical skills like technology design and programming, data analytics will continue to rise, soft skills such as creativity, originality and initiative, emotional intelligence, leadership and social influence will see a rise in the next few years [16]. This will require HR to identify innovative ways to help employees develop them, to fulfil the talent needs of a rapidly changing economy.

Beyond identification of key future skills required, HR will need to implement and drive these upskilling and reskilling efforts. Our research shows that the focus for HR will shift from content development to the curation of best-in-class content. HR can do so by leveraging widely available learning content and platforms that address the fast-changing skill needs.

The modality to deliver these skills will also change. With the rise in technology solutions and innovative platforms for the delivery of personalised learning, HR is expected to develop personalised learning journeys and identify digital platforms that offer bite-sized learning. There is also a growing number of experiential and collaborative learning interventions such as augmented / virtual reality (AR / VR) simulators, group-based online learning courses, which will further enhance the learning experience. These digital learning and development platforms provide training content that can be accessed on-demand and offer personalised tracking and monitoring of the skills acquired. The use of technology can also enhance participation by sending personalised reminders to employees on relevant learning programmes and initiatives.

As skills evolve, HR will continuously enhance the content and learning experience by adopting an agile approach based on employee feedback, as well as training effectiveness (i.e. linkage of training to employee performance), to ensure learning initiatives are aligned to business needs.

Finally, HR will also need to pro-actively shape a learning culture in the organisation and incentivise employees to learn new skills and develop an appetite for lifelong learning. This will require HR to advocate a mindset change among leaders and employees to take

ownership of their learning goals and journeys. Apart from empowering employees to through availability of learning content and platforms, HR can develop initiatives to focus on the benefits of reskilling and upskilling such as campaigns to spotlight employee success stories and sharing by leaders to reinforce the message. These strategies can be used to encourage employees to continuously learn new skills.

Theme 3: Build consumer-grade experiences



HR needs to design talent journeys across the talent lifecycle and leverage technology to deliver consumer-grade experiences for employees

Business and HR leaders identified employee engagement among the top five human capital processes impacted by technology, as shown in Figure 13. While other functions like Marketing have been delivering consumer-grade experiences to customers, HR has been behind the curve in using technology to deliver personalised and meaningful employee experiences. Employees are constantly exposed to a sophisticated and engaging consumer experience outside the workplace, and they would expect to be engaged in similar or better ways in their organisations. Talent journeys and engagements need to go beyond single-point, one-off engagement initiatives to technology-enabled, personalised experiences.

To meet such expectations, HR will need to use insights gathered through data and design thinking to map talent journeys and develop meaningful and personalised experiences throughout the talent lifecycle. For example, during the talent acquisition process, "key moments that matter" need to be identified. By adopting a user experience lens, HR would analyse every step of the process, in order to redesign processes, using technology where relevant.

3. Overall Findings

Using digital platforms such as social media, mobile applications, social robotics (personal assistants, chatbots etc.), HR can gather real-time data to analyse the needs and wants of their workforce. Our survey highlighted some of these as the top technologies impacting employee engagement function, as shown in Figure 14, as they enable HR to continuously enhance the employee experience in an agile manner and better enable personalisation of employee experience.

The top technologies impacting the Employee Engagement function are the ones being widely used to deliver consumer-grade experiences.

Figure 14: Ranking of technologies impacting talent experience

	Professionals
Social Media	1
Mobile Apps	2
Social Robotics (PAs, Chatbots etc.)	3
Data Analytics	4
Al & Machine Learning	5

HR

Theme 4: Digitalise HR



HR needs to develop an integrated HR technology roadmap to drive implementation of seamless and effective delivery of HR processes While previous studies show that Singapore has been slow in the HR technology adoption, ranked fifth (out of 17 countries globally) [17], after Sweden, the U.S., the U.K. and China, our research highlighted that business leaders expect HR to "experiment with technology" in order to drive process optimisation and enhance the employee experience. Automation of routine tasks and processes, such as screening of CVs, query handling and payroll processing is taking place across various HR functions. RPA and data analytics are shifting HR operations towards more self-service models. At the same time, consumer-grade applications are increasingly being used to enhance the delivery of talent experience.

These changes have opened a myriad of possibilities for HR in terms of process optimisation and service quality improvements. In particular, the Operations and Technology function will play a paramount role in the future to help integrate the technology needs across various HR functions into a strategic technology roadmap.

As a result of this shift in expectation, HR professionals will need technology-related skills to identify, evaluate and implement solutions that enhance the efficiency and effectiveness of HR operations.

Professionals in HR Operations and Technology function will also need specialised skills such as Application Programming Interface (API) design and Robotic Process Automation Programming, to ensure that different technology solutions are integrated for seamless service delivery. This is also supported by the research in this study, which found that these are among the top five technologies impacting HR and provide a huge opportunity for process optimisation and quality improvement, as shown in Figure 15.

While some progressive organisations have invested in HR technology, there is a need for greater investments across more organisations for strategic HR to take root across industries. This requires the

HR profession to develop the relevant business case for investments in technology in order to influence key stakeholders in their organisation to support such investments.

Figure 15: Top technologies impacting HR

in next three years	HR Professionals	Business Leaders
Data Analytics	1	2
Al and Machine Learning	2	1
Data Security	3	3
Mobile Apps	4	3
Robotic Process Automation	5	6
Cloud Technology	6	5

Theme 5: Drive data-based decision making



HR needs to drive data-based decision making across HR and business functions for more robust talent related decisions

Our research identified data analytics as the technology with the greatest impact for five out of seven HR functions (see Figure 16 for details).

Data analytics was also highlighted as **one of the top five technologies** by both business and HR leaders for its impact on human capital related issues.

As data becomes more readily available via technology-enabled platforms and applications, there will be an increased need for HR to move from basic reporting to the use of analytics to drive data-based insights that informs talent decisions. For example, analysis of hiring and promotion data can highlight possible bias, the knowledge of which can help companies make more objective decisions on hiring the best talent. In doing so, it can also help to improve diversity in the organisation. It will also allow HR to build the business case for HR-related technology initiatives and investments.

HR professionals would therefore need to enhance their skills in using predictive modelling, codification of intangibles, identification of linkages between talent metrics and business outcomes, and the management of data generated by cloud-based platforms and applications. Additionally, as HR professionals obtain access to a wider range of sensitive employee information, HR will also be responsible to design robust data governance frameworks and put in place corresponding measures for data security, privacy and usage.

Figure 16: Ranking of data analytics impacting HR function

HR Functions	Rank of data analytics
Operations and Technology	1st
Performance and Rewards	1st
HR Business Partner	1st
Talent Attraction	Top 5
Employee Experience and Relations	Top 5
Talent Management	1st
Learning and Organisation Development	1st

How do these key themes impact organisations at various stages of maturity?

Organisations early stages transformation can focus on automation of repetitive and transactional HR services such as administration of payroll, benefits and leave etc. through off-the-shelf technology solutions related to RPA and AI. More of these processes will become self-service via standardised platforms and mobile applications, that will enhance access and experience of service delivery. Multiple off-the-shelf platforms and mobile applications will be integrated to ensure that there is high quality data available. This data can be analysed to provide insights for the business to drive talent decisions.

The use of automation for delivery of transactional HR processes will free up time for HR to focus on enhancing talent experience through critical processes like performance management, learning, recruitment and onboarding. HR will evaluate off-the-shelf cloudbased solutions to identify the right technology to transform the experience and delivery for these critical processes. HR will also support business transformation by working with the business to identify process automation opportunities and driving change management.

For organisations further along their HR transformation journeys, HR will design an integrated HR technology roadmap and plan implementation of technology across all HR processes, to deliver a seamless employee experience and achieve greater efficiency. To do this well, HR must have knowledge of integrated, as well as stand-alone technology solutions that will deliver a consumer-grade and seamless talent experience across the talent lifecycle. Often, this is done through use of a core HR platform and additional technology solutions that can be integrated with this platform. HR will segment and identify different talent personas based on the profile of employees and develop holistic and personalised talent experiences such as candidate and onboarding journeys, personalised learning journeys, etc.

The design of the data architecture will be key to enable seamless flow of data between HR and business systems. HR can deliver advanced analytics and insights using predictive models and linkages between people metrics and business outcomes to influence talent decisions. HR will optimise organisation-wide business processes by identifying optimal human-machine collaborations and job redesign. HR will also implement change management initiatives to influence behaviour of employees and senior leaders for successful transformation outcomes.

Case Studies

The case studies below showcase the impact of the five themes across HR functions in various organisations:

CapitaLand



Staying status quo will only disrupt us out of existence. I am intent on CapitaLand shaping the future, rather than be shaped by it. **J*

Lee Chee Koon, Group CEO, CapitaLand Group

**Lee Chee Koon, Group CEO, CapitaL

200 Once Room, Group GEO, Gaphaeana Group

The business need



CapitaLand is one of Asia's largest real estate companies headquartered in Singapore. CapitaLand embarked on a digital transformation journey. To support this, HR also equipped itself by embracing digitalisation at three levels – Paperless HR, Automated HR and Smart HR. Through this strategy several initiatives were launched to automate transactional tasks, enhance process efficiency and deliver a better talent experience. As this helped to free the bandwidth for HR, HR built own capability in developing RPA and data analytics capabilities for itself and also put in place a continuous learning strategy to reskill and upskill the workforce with relevant digital skills to future proof the organisation.

The solution



CapitaLand's digitalisation strategy was supported by HR through 3 key pillars:

Paperless HR

- Implemented an **electronic document management system**, **IBM FileNet** that enables consumer grade experience. The system enables a central storage of digital documents and facilitates real-time retrieval employee information. This is sustainable and has eliminated the need for real estate to store physical documents.
- Introduced DocuSign, that enabled HR to send employment contracts for electronic signatures since September 2019, thereby enhancing candidate experience, reducing recruitment turnaround time and removing the need for physical documents.

Automated HR

 Built a robotic process automation (RPA) team within HR to introduce intelligent automation for transactional HR processes such as data verification for system migration and report generation (e.g. Applications for Government paid leave and training grants etc.).

Smart HR

- Trained an Al-based chatbot to digitalise the recruitment process in order to provide a
 consumer-grade experience i.e. personalised recruitment touchpoints and conduct competencybased interviews. This reduced recruitment time, enhanced candidate experience as well as
 objectivity of assessment.
- Launched an Al-powered writing tool, TapRecruit that helps to develop clear and concise job
 descriptions to clarify the expectations, find better matches / candidates and reduce turnover.
- Used data analytics to provide insights for data-based decisions, for areas such as learning & development, employee attrition and talent management analytics. The team uses various tools such as full Microsoft stack, Azure Data Warehouse, Power BI and Python etc. to perform various advanced data modeling.

Underpinning the above pillars, HR has developed the **Building Capability Framework** (BCF) which provides a platform for continuous learning to equip the workforce with knowledge in latest digital skills such as data analytics, cloud computing, artificial intelligence, blockchain and cybersecurity etc.

The results



- The Paperless HR initiative saved ~100 man days per year
 - ~100 man days per year and there were further savings of SGD 5,000 per year from reduced printing costs.
- Migrated data verification by the RPA bot saved ~900 man days and was completed with 100% accuracy within two days.
- The automation of report submissions saves ~130 man days per year.
- Al-powered chatbot improved recruitment turnaround time from six months to three months.
- TapRecruit considerably reduced attrition thereby lowering the hiring costs.
- At the highest level, visualisations of data in Power BI have saved ~1700 hours.

Singtel



We are focused on going high-tech to free up valuable time and capacity to provide a high-touch experience and engagement for our people and this will enable us to build a high-trust organisation. ### 13.50 people and this will enable us to build a high-trust organisation.

Aileen Tan, Group Chief HR Officer, Singtel

The business need



Singtel, Asia's leading communications technology group, is headquartered in Singapore. To step ahead of the competition and get all its employees to embrace its digital transformation journey, Singtel is leveraging technologies with the aim of 1) improving employee experiences, 2) improving efficiency of their recruitment processes, 3) equipping its workforce with digital skills, and 4) making smarter, data-driven people decisions.

The solution

- Deployed intelligent automation such as Artificial Intelligence (AI) along with chatbots
 to automate the transaction processing tasks and enhance employee experiences. Chatbot
 'Luis' provided personalised answers to employee queries and served as a personal assistant to
 employees. Chatbot 'Kate' guided Management Associate Programme (MAP) applicants through
 the multi-stage assessment process to enhance seamless candidate experience.
- Applied intelligent automation such as Robotic Process Automation (RPA) to automate transactional processes such as raising job requisitions and generating certificates of employment etc.
- Launched the Accelerate, Co-create and Transform (ACT) initiative to deepen digital skills of
 employees and partnered with Union of Telecom Employees (UTES) to form a Company Training
 Committee to ensure employees remain relevant in the digital economy.
 - ▶ Launched a "4G to 5G Pathways" course for network engineers to equip them with new skills relating to 5G connectivity.
 - Created customised SkillsFuture for Digital Workplace programme to deepen digital literacy of employees.
 - ▶ Launched a digital learning application called #CURIOUS to help employees on their digital learning journeys. It features curated learning channels with some 100,000 courses and videos covering topics from technology to leadership.
 - ▶ HR implemented change management initiatives, such as the CataLEADtic workshops for employees to cultivate a learning culture.
 - Organised RPA workshops, such as the two-day Bot Maker Hackathon, to equip employees with skills to build their own bots to help them in their work.
- Leveraged **Al-driven data analytics** to develop predictive insights for talent attrition and potential, and reduce personal bias for critical talent decisions.

The results



- Chatbot 'Luis'
 conducted 12,760
 chats with employees on HR
 policies, accounting for 53% of
 all gueries.
- Chatbot 'Kate' handled more than 2000 MAP applicants per year.
- Average employee learning hours per year increased from 28.9 to 32.7 hours.
- 35 RPA bots contributed to savings equivalent to employing 5.46 Full Time Equivalents.
- Time taken for line managers to conduct talent review was reduced from six months to four months

DBS Bank



An agile and innovative workforce will also make Singapore's Smart Nation ambition a reality and along with this, we are making significant investments to groom a generation of digital bankers, strengthening Singapore's talent pool. 33

Lee Yan Hong, Head of Group HR, DBS

The business need



DBS Bank, named "World's Best Digital Bank", is headquartered in Singapore. DBS looked at digital transformation from two aspects – being digital to the core and enhancing customer journey. In order to do this, DBS embarked on a HR transformation journey with the aim of embedding digital aspects across the talent lifecycle - i.e. enhancing the recruitment process for high volume roles; equipping the workforce with digital skills to take on jobs for the future; achieving lower turnover rate; driving innovation and enhancing service delivery through data-driven decisions.

The solution

- Launched a web-based virtual recruitment bot called JIM (Jobs Intelligence Maestro),
 which uses intelligent automation such as artificial intelligence, machine learning and
 social robotics to shortlist potential hires and interact with candidates real-time. With the adoption
 of JIM, the HR talent advisors could focus on higher value activities such as active sourcing of
 candidates, competency-based interviews with applicants, advisory for hiring managers etc.
- Embarked on an organisation-wide reskilling / upskilling initiative built using "triple-E" framework experience, exposure and education to future-proof the workforce and equip employees with the necessary skills in a dynamic financial industry. For education, the DBS Learning Hub, an Al-powered Learning Management system, was leveraged.
 - ▶ The DBS Learning Hub, provides learner-driven learning experiences to exponentially increase the speed and scalability of learning. Learning content is curated from multiple sources including knowledge sharing by employees. It also recommends the learning based on learner's history and profile.
- Through retraining and redesigning the job to meet the demands of digitally-savvy customers,
 Customer Service Officers (CSO) have been re-skilled to do more than just answering incoming
 calls. A CSO's role has been enhanced to also serve customers through digital channels such as
 live chat, video teller machines (VTM), emails and even social media. A new role such as Digital
 evangelist was created to encourage customers to use DBS' digital channels through monthly
 roadshows at community centres or bank branches.
- HR developed talent analytics using open source machine learning software to develop
 predictive models for talent data such as identifying employees at flight risk. Dashboards were
 developed in-house to provide an intuitive user interface for managers to view and analyse the
 data. HR could then focus on guiding managers on managing such employees.

The results



- Reduced candidate screening time by 75%, saving 40 manhours per month.
- Candidate drop off rate reduced from 15% to 3% with over 90% indicating positive experience with JIM. JIM also answered 97% of candidates' questions.
- Higher value jobs were created through job redesign and the customer journey was enhanced.
- Retrained over 500 customer centre employees to take on new roles.
- Predicting flight risks reduced attrition rate in Singapore by approximately 10%.

Public Service Division (PSD)



In support of Singapore's Smart Nation vision, we first had to uplift the capabilities of the HR community and provide them with platforms and skills to be tech-savvy to adopt progressive HR policies in their respective agencies. 33

Low Peck Kem. Chief HR Officer. PSD

The business need



The Public Service Division (PSD) sets policy directions for shaping the Public Service through public sector leadership development and implementing progressive and effective Human Resource and Development policies. Its vision is to deliver a first-class Public Service for a successful and vibrant Singapore. To achieve this, PSD has implemented a series of digital transformation initiatives to improve HR service delivery across agencies, enhance upskilling and reskilling as well as use analytics for better decision making.

The solution



- Developed future focused competency roadmaps in partnership with the Civil Service College (CSC) to define future skills and competencies required for public officers.
- CSC launched the whole-of-Government digital learning platform, LEARN, that lets public officers
 learn anytime, anywhere, and enables them to upskill and adapt to the changing workplace.
 Through LEARN, public officers have access to over 3,000 of CSC's proprietary content and
 curated learning pathways from renowned third-party content providers like Udemy and Harvard
 Leading Edge. To promote the culture of digital learning in the Singapore Public Service, the HR
 community are supported with curated LEARN content to build core and emerging competencies.
 - Within PSD, the Learning Bingo initiative was implemented during the circuit breaker period. The initiative was a targeted intervention to encourage junior executives to learn and upskill and empowered them to take charge of their learning and to pick up new skills to increase their career mobility. 16 LEARN courses were curated based on four categories, i.e. Personal Development, Office Productivity Tools, Soft Skills, and Emerging Skills.
- Introduced intelligent automation to enhance the recruitment and onboarding process.
 - ▶ Tapped on an automated video interviewing platform which allows candidates flexibility to respond to interview questions and written tests through mobile devices, and line managers can also review the candidates' videos on the go. The HR team piloted the use of video interviews with a few teams to obtain feedback and collect success stories. These benefits were shared with other line managers to obtain buy-in and increase adoption. The use of video interview resulted in time-saved due to substitution of administrative tasks, allowing HR to focus on other value-added work (such as streamlining and automation of processes).
 - Used RPA to automate the onboarding process, which helped various departments to save the time spent in processing inflow tasks such as manual requests for user creation forms for provision of IT equipment, staff pass, asset inventory tracking etc. The use of process automation has also allowed the corporate support officers to shift from manual data entry, to bot maintenance and enhancement.

The results



Across the Public Service

 LEARN helped to promote skills learning at scale with speed. LEARN increased awareness in Cyber and Data Security for ~ 100k public officers within six months.

Within PSD

- Participants from the Learning Bingo initiative completed close to 180 courses within one month of gameplay.
- During the circuit breaker month (End Apr – May), junior executives spent an average of 540 min (9 hours) on LEARN.
- Video interviews have reduced time spent by HR in administering assessments by 75% per recruitment.
- RPA reduced time taken to complete transactional onboarding tasks from 76 mins per inflow to 7.5 mins.

Impact of technology on the HR operating model

Technology changes (e.g. intelligent automation for delivery of HR services and consumer-grade employee applications) are impacting the HR operating model. All HR functions are expected to be more data-driven in their approach on talent decisions and use advanced data analytics to deliver the right business outcomes.

As technology enables automation of routine tasks and frees up bandwidth, HR professionals with the relevant skills can shift their focus towards driving business transformation through design of strategic solutions, greater personalisation of services and databased decision making.

The traditional HR operating model with defined roles across three focus areas, i.e. HR service delivery, HR business partners and Centres of Excellence, will evolve. The HR Technology and Operations function which is at the core of HR service delivery has evolved to deliver routine HR services through intelligent automation and investments in cloud-based HR management systems (HRMS). Organisations that did not make such investments lack integration between different technology solutions used for HR service delivery in the organisation, resulting in challenges like inconsistent data for talent metrics, inefficient and fragmented delivery and experience of HR services.

In the future, HR Operations and Technology function will need to design and implement an integrated HR technology roadmap encompassing solutions across different HR processes. This will allow more efficient and seamless service delivery. The function will also be responsible for designing the data architecture across HR and business systems, to develop meaningful linkages across talent metrics and business outcomes. These systems will generate large volumes of sensitive employee data. The function will be tasked with ensuring data security and privacy and providing a framework for appropriate use of data through data governance mechanisms.

HR Business Partners will evolve to work closely with the business to drive business transformation by identifying optimal human-machine combinations. They will need skills in job redesign and strategic workforce planning, as well as change management and coaching skills to guide the business through this transformation. They will also need to use data insights to drive the right talent decisions.

As business and talent needs become more complex and diverse, HR Centres of Excellence (COEs) will be expected to operate beyond their traditional functional silos. They will be expected to deliver holistic and strategic solutions that are personalised for specific talent needs in different functional areas.

For example, the rising expectations of talent for consumer-grade applications will drive the Talent Experience COE to focus on the development of talent personas, which are archetypes of different talent profiles within the organisation, based on which talent experience journeys will be designed. The focus of this COE will shift from administering annual employee engagement surveys to adopting continuous listening and analysis of real-time feedback, to enhance the overall talent experience journey. The talent experience journey will also guide other COEs to design seamless talent experiences across the talent lifecycle, to personalised, on-demand experiences deliver using technology.

Beyond three years, the COEs will continue to evolve and develop increasingly personalised and techenabled solutions to for multi-dimensional talent issues.

In future, the resources in COEs will shift towards "go-to-market" agile teams as part of issues-based "taskforces". These "taskforces" of agile resource pools will come together to solve multi-dimensional talent issues, such as productivity & agility, wellness, talent experience, with greater collaboration amongst specialists from different areas in HR. For example, addressing "productivity and agility" will require expertise in job redesign to augment job tasks and enhance productivity, in learning to identify the required capabilities and training for the augmented job, in organisation development to drive changes within the organisation, and in rewards to compensate the enhanced job accurately.

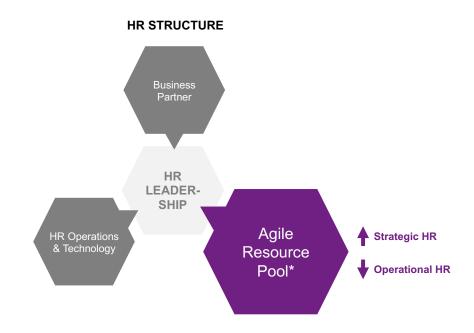
3. Overall Findings

These agile resources will be problem solvers and multi-skilled across different areas in HR. They will develop into "T-shaped" professionals, with, breadth across general HR business partnering knowledge, coupled with deep expertise in one or two HR specialisation areas. Figure 17 summarises the key features of the HR operating model that will be prevalent in the future.

The concept of HR being remodelled in a way

akin to consulting functions is not entirely new [18]. However, it is not yet prevalent. To formalise this arrangement in future such that the "taskforces" can work as agile teams, HR will need to clarify accountability for these agile teams, in terms of the reporting structure, management, work allocation and KPIs. There will also be a need to define processes to manage the workload of individual resources in these teams, and to accurately recognise and reward performance of individual members.

Figure 17: HR operating model prevalent in future



The current COE silos will cease to exist

Replaced with "go-to-market" agile teams

- These "taskforces" of agile teams will come together to solve multi-dimensional talent issues, e.g. Productivity & Agility, Wellness, Talent Experience etc.
- These teams will consist of "T-shaped" professionals, with, breadth across general HR business partnering knowledge, coupled with deep expertise in one or two HR specialisation areas.
- Teams will disband and regroup in an agile manner.
- To enable this structure, there will be a need to clarify accountabilities, define reporting structures and KPIs, and recognise / reward performance.

Example: "Productivity and Agility" team will require expertise in -

- Job redesign to augment job tasks to enhance productivity.
- Learning to identify the required capabilities and training for the augmented job.
- Organisation development to help drive the changes within the organisation.
- Rewards to compensate the enhanced job correctly.

Note: The pace of evolution to this operating model will depend on maturity of organisations and their HR practices. The type of sector, organisation size, and geographical presence of operations are key factors impacting HR maturity within an organisation.

HR operating model for SMEs

SMEs typically rely on generalists for most HR functions, except for some functional specialists in key areas such as performance and rewards. HR teams in SMEs tend to be small and do not have specialised technology experts.

In the future, there will be a need for generalists who are multi-skilled across different areas of HR within an SME to deliver holistic solutions for multi-dimensional talent issues.

Additionally, across the board, both generalists and functional specialists will need to build analytics capabilities, to generate talent insights to inform talent decisions. To drive effective and efficient HR service delivery, HR professionals in SMEs will need a better understanding of the technology solutions that augment HR and business functions and streamline processes.

Most importantly, the use of technology will free up HR bandwidth to work more closely with business leaders as a strategic partner in business transformation.

Given the limited resources in SMEs, it is important for HR to prioritise areas of focus across the talent lifecycle and identify off-the-shelf solutions that enhance talent experience. Functional specialists in SMEs will need business acumen to ensure that they integrate technology solutions that are relevant for their business needs. For example, if an organisation requires large-scale reskilling, specialists in HR will work with the business to identify future skills and curate relevant training content and identify solutions to implement technology-enabled learning.

Finally, to showcase the return on such investments, HR must link talent metrics to business outcomes by measuring the impact of such investments on performance.

Impact of technology on HR tasks and jobs

As HR functions transform, HR jobs will be redefined, and new skills will be required to perform them. The study used Willis Towers Watson's Reinventing Jobs methodology (referenced in the Methodology section of the report) to analyse the impact of technology at the task level for each job in the Skills Framework for HR [19]. The list of jobs was expanded from 21 to 27 jobs, to reflect the current industry landscape.

The Reinventing Jobs methodology assesses the nature of each task (repetitive vs. variable, independent vs. interactive or physical vs. cognitive) within a job. Based on the nature of the tasks and the type of technology involved in transforming the tasks, we determined whether the tasks were replaced or augmented by technology. Additionally, new and emerging tasks were identified arising from the impact of technology.

Figure 20 summarises the assessment of the impact of technology on jobs. Most of the 27 jobs will experience significant changes. Some tasks may be displaced due to automation. Others will be augmented by technology, with changes to the expectations, nature of tasks and skills required.



Eight jobs have been identified as being highly impacted by technology. These are mainly at the Associate and Executive level and typically perform three categories of tasks:



Transactional or administrative tasks that are repetitive or process driven, and can be automated through RPA



Tasks which are process driven with finite amount of variability that can be automated via intelligent coding



First line support and basic query handling that can be substituted by chatbots

Figure 18 shows the type of automation impacting these three categories of tasks. These roles will evolve to focus on the delivery of higher value-added tasks that require greater knowledge of technology solutions and interface with technology.

For instance, to support the delivery of complex services such as personalised interactions with employees, managing escalated employee queries, assessing insights through data and researching on service delivery technologies. Given the elevation of these jobs, upskilling will be an imperative.

16 of the 27 jobs have been identified to experience a medium level of impact due to technology. These are primarily at the Manager and Head levels. Technology will augment these jobs to deliver higher value-add, by increasing bandwidth for more strategic tasks. There will also be a need to influence business leaders to drive data-based decision-making and to enhance service delivery to employees.

Finally, **three jobs** have been identified as being at a low level of impact. These are Head, Talent Management, Head, HR Business Partner, and Manger,

^[19] The Skills Framework for HR which covers 21 jobs across 7 functional tracks is the starting point for the jobs considered in this study. The 21 jobs were further broken down and additional jobs were considered to study the impact on the 27 jobs across the HR sector.

Organisation Development. While the responsibilities for the jobs will become complex due to business transformation (e.g. the need to manage a wider talent ecosystem, and to engage with business to drive business transformation and organisational change), the extent of automation for such roles is limited with minimal new technology-related skills required.

Job adjacencies for jobs experiencing high impact by technology

For individuals in the eight HR jobs that are highly impacted by technology and at high risk of displacement, the study identified potential job adjacencies within and outside the HR function. These adjacencies were identified through an analysis of skills overlaps, recent transition trends of HR jobs, as well as the likelihood of the suggested destination jobs also experiencing displacement through automation. Data was gathered from online sources such as job boards, professional networking sites and industry specific portals across Singapore and the reference countries, to develop a database of 2.5 million datapoints of job movements by HR professionals. The approach has been described in detail in Section 2.

Tables 1 and 2 below show the top destination roles within and outside HR respectively, for each of the highly impacted HR role. The tables also include the indicative skills that will be required to make the transition successful.

It is important to note that significant upskilling is required in the area of technology adoption and use, whether the move is within or outside HR. Most job roles across many industries will experience rapid technology disruption. Therefore, upskilling is imperative for anyone that wishes to perform an enhanced role in most industries under 4IR.

Figure 18: Jobs at high risk of automation

HIGH RISK OF AUTOMATION

Robotic Process Automation



- **Payroll officer**
- Benefits administrator
- Learning administrator

Cognitive Automation



- **Employee onboarding** assistant
- Sourcing / Screening specialist (TA)
- **HR Assistant**

Social Robotics / Chatbots



- HR Shared Service officer / executive
- **Employee Relations** executive (query handling)

Displacement of transactional and administrative roles:

Roles that are repetitive and process driven can be automated with RPA to reduce mistakes and enhance efficiency.

Automation of variable and cognitive roles that can be delivered through intelligent coding:

 Cognitive automation such as AI / ML augments variable, interactive, mental work to improve productivity and performance.

Substitution of first line support and query handling roles:

 Roles handling queries and providing first-line support based on defined process, can be substituted by chatbots to reduce variance.

THE ABOVE LIST OF ROLES IS NOT EXHAUSTIVE

3. Overall Findings

Table 1: Job adjacencies for eight highly impacted jobs within HR

Origin role	Top destination roles within HR			
Executive / Associate, Operations and Technology	HR Business Partner Executive		HR Business Transformation Executive	
Associate, Talent Management	HR Business Partner Executive	Internal Re	ecruiter	HR Experience Specialist
Executive, Employee Experience and Relations	HR Business Partner	Talent Deve Specia		HR Analytics & Transformation Executive
Associate, Employee Experience and Relations	HR Business Partne	r Executive	HR Analyt	ics & Transformation Analyst
Associate, Learning and Organisation Development	Talent Development Performance Associate Rewards As			HR Experience Specialist
Executive, Performance and Rewards	HR Business Partner		Talent	Management Executive
Associate, Performance and Rewards	HR Business Partner		Talent	: Management Associate
Associate, Talent Attraction		Talent Engager	ment Associat	re

Table 2. Job adjacencies for eight highly impacted jobs outside HR

Origin role	Top destination roles outside HR	Skills top-up (indic	for transition ative)
5 /	Business Analyst	Business Strategy / Analysis	Pricing Strategies
Executive / Associate, Operations and	Associate Management Consultant	Business Development	Customer Service
Technology	IT Project Specialist / Executive	System Integration	Network Administration
	Associate, Change Management Consultant	Business Process Improvement	Change Management
Associate, Talent Management	Associate, Data Analyst	Data Visualisation	Data Warehousing
	Media Planning Associate	Digital Marketing Strategy	Search Engine Optimisation
	Account Management Executive	Market Research	CRM System
Executive, Employee Experience and Relations	Operations Associate / Coordinator	Quality Assurance / Control	Risk Management
	Business Development Executive	Account Management	Digital Marketing
	Brand Management Associate	Brand Development	Digital Strategy
Associate, Employee Experience and Relations	Communications Associate	Content Creation	Video / Copy Editing
	Digital Marketing Associate	Customer Segmentation	Search Engine Optimisation

3. Overall Findings

Table 2. Job adjacencies for eight highly impacted jobs outside HR (continued)

Origin role	Top destination roles outside HR	Skills top-up for transition (indicative)		
	Data Associate / Analyst	Market Research	CRM Systems	
Associate, Organisation Development and Learning	Marketing Associate	Social Media Management	Campaign Planning	
	Associate Management Consultant	Business Development	Market Research	
	Business Process Analyst / Assistant Manager	Process Reengineering	Requirements Analysis	
Executive, Performance and Rewards	Business Intelligence Executive	Enterprise Resource Planning	System Integration	
	Digital Marketing Executive	Social Media Marketing	Content Creation	
	Project Analyst / Project Associate	Event Planning / Management	Contract Management	
Associate, Performance and Rewards	Digital Marketing / Brand Associate	Customer Segmentation	Search Engine Marketing	
	Performance Analyst	Financial Modelling	Process Reengineering	
	Corporate Strategy / Planning Analyst	Market Research	KPI Dashboards	
Associate, Talent Attraction	Associate, Business Analyst	Business Process Improvement	Financial Analysis	
	Project Associate / Analyst	Market Research	Agile Methodologies	

Impact of technology on emerging jobs in HR

As technology enhances existing HR tasks and jobs, it will also create new responsibilities and emerging jobs in HR. From the industry scan [20], 2.5 million HR jobs were analysed across US, UK, Sweden and Singapore and three categories of emerging HR roles were identified (as shown in the Figure 19):



Roles directly related to HR transformation and digitalisation efforts, such as HR Data Analyst and Head / Director of Technology.



Specialist roles that would enhance the talent experience and address a niche or specific need such as the Learning Designer and Employee Onboarding Specialist for talent experience, and the Talent Intelligence Analyst role for targeted scouting and candidate recommendation.



Cross functional roles that are generalist in nature, involved in the design or deployment of holistic talent solutions. This would include the People Strategist, who will partner with managers and teams to tackle day-to-day people issues and drive the execution of performance management and talent development programmes. To do so, they need the ability to implement strategic workforce planning and to plan talent acquisition. Another example is the Head of Talent Enablement, who will be responsible for all aspects of the organisation's talent strategy including onboarding, performance, training, rewards and careers and will drive the delivery of strategic talent programmes.

In total, **eight emerging roles** were identified, and the relevant elements of these jobs were incorporated, where appropriate, as new tasks into the 27 HR jobs to ensure that the jobs examined in this study are future focused. In the future, as organisations mature and workforce challenges evolve, some of these roles may take on sufficient responsibilities to become standalone roles.

Figure 19: Emerging Jobs in HR

Category	Emerging jobs
Transforming and digitalising HR	HR Data Analyst Head / Director, Technology
Specialist roles	 Learning Designer Employee Onboarding Specialist Talent Intelligence Analyst
Cross-functional roles	6. People Strategist7. Head, Talent Enablement8. Head / Director, Organisation Transformation

3. Overall Findings

Beyond the roles found through our research, other emerging roles in HR were identified in WTW's HR 4.0 study [21]. These include:



Bot Monitor, who manages, monitors and trains chatbots to improve the employee experience.



Cultural Ambassador, who collaborates with business leaders to influence, develop and embed the organisation's culture, and supports the implementation of initiatives to enable culture change in the workplace.

Impact of technology on future skills for all HR professionals

As HR needs to drive business transformation, manage the future workforce challenges and enable evolution of work, this requires them to acquire future skills. To equip HR for the future, eight cross-functional skills have been identified for all HR professionals.



HR needs to adopt technology to deliver efficient and effective HR services. Knowledge of **HR technology adoption** will be critical for recommending appropriate technology solutions and delivering a seamless talent experience.



HR professionals will also need skills in **people analytics** to augment talent strategies and develop data-based talent programmes in the organisation.



They will need to present a compelling business case for various talent initiatives / investments

through use of **data-driven story telling** to drive talent decisions.



Skills in organisation behaviour and change management, relationships and communication, and building an agile mindset will be critical for driving business transformation by influencing behavioural change and developing an agile and a dynamic culture.



Business and financial acumen and progressive and inclusive workforce policy implementation will be critical to developing appropriate talent strategies and polices to balance the needs of business and expectations of external stakeholders.

Additionally, function-specific skills have also been identified for each of the HR functions. Figure 20 summarises the impact of technology on HR jobs and the future skills required. The definitions of the future skills are detailed in the Impact and Skills Analysis in the Appendix.

Globally, rapid technology changes are transforming the world of work. Organisations are transforming their business models and jobs in order to take advantage of these opportunities and impact of the 4IR. The HR function should be at the forefront to drive this change, harnessing the opportunities for the business through strategic HR investments in technology and skills. As HR takes charge to deliver a seamless talent experience, drive business transformation and add value by identifying capabilities needed to future-proof businesses, HR will need to transform itself in order to deliver these responsibilities.

In the next section, we will focus on the impact of technology on the nature and scope of each HR function. These sections will deep-dive into technology trends impacting each function, and how these trends will impact the expectations and future skills required.

Figure 20: Overview of technology impact on 27 jobs in HR

	Performance and Rewards (P&R)	Talent Management (TM)	HR Business Partner (HRBP)	Employee Exp. and Relations (EER)	Operations and Technology (Ops & Tech)	Organisation Development (OD)	Learning (L)	Talent Attraction (TA)
HIGH	Executive, P&R Associate, P&R	Associate, TM		Executive, EER Associate, EER	Executive / Associate, Ops & Tech	Ass	sociate, L&OD	Associate, TA
MEDIUM	Head, P&R Manager, P&R	Manager, TM Executive, TM	Manager, HRBP	Head, EER Manager, EER	Head, Ops & Tech Manager, Ops & Tech		Head, L&OD ecutive, L&OD Manager, Learning	Head, TA Manager, TA Executive, TA
_				Chie	Human Resources Officer			
LOW		Head, TM	Head, HRBP			Manager, OD		
0	FUTURE SKIL	. LS (Key future sk	ills required)					
FUNCTION SPECIFIC	 Continuous Performance Management Agile Pay Philosophy and Structures Segmented Evaluation and Levelling Modular Pay Components Behavioural Drivers Compensation Governance 	 Personalised Talent Management Strategic Talent Deployment Capability Assessment Framework Career Journey Design Succession Planning 	 Strategic Business and HR Advisory Talent Experience Management Technology-driven Talent Assessment Strategy Work Architecture and Job Redesign Omni-channel Communication 	 Talent Persona Creation Talent Journey Mapping Design Thinking Continuous Listening Strategy Omni-channel Communication Cross Cultural Sensitivity 	 Integrated Technology Roadmap Development Application Programming Interfaces (APIs) Design Data Architecture Design Data Security and Privacy User Experience / User Interface Design Product Testing Technology Vendor Management Robotic Process Automation Programming 	 Organisation Transformation Workplace Culture and Change Change Management Advisory Sustainability People Governance Omni-channel Communication 	 Talent Development Strategy Learning Content Curation Innovative Learning Delivery and Experience Self-Directed Learning User Experience / User Interface Design Design Thinking Content Marketing Strategy Technology-driven Talent Assessment Strategy Sustainability Omni-channel Communication 	 Talent Persona Creation Data-led Talent Acquisition Social Media and Talent Marketing Strategy Candidate Experience Design Technology-driven Talent Assessment Strategy Talent Onboarding Experience Design Talent Value Proposition Design Omni-channel Communication
CROSS- FUNCTIONAL	Business and Financial Acumen Agile Mindset HR Technology Adoption People Analytics Organisational Behaviour and Change Management Agile Mindset HR Technology Adoption Relationships and Communication Progressive and Inclusive Workforce Policy Implementation							



4. Overview of HR Functions

Impact of technology on HR functions

Greater prevalence of intelligent automation, rising expectations of employees for consumer-grade applications and use of predictive and advanced analytics, are key trends that have reshaped and transformed the HR functions to better support the business and workforce. The subsequent paragraphs summarise the impact of these trends on HR functions covered in the study.



The **Operations and Technology** function will need to architect the organisation's HR technology roadmap and be the key enabler for technological change within HR. Additionally, the function will enable advanced data analytics across HR by designing talent data architecture and elevating its capabilities to drive data-based decision making.



As a consumer-grade experience becomes more critical, the **Employee Experience and Relations** function will take on new responsibilities of optimising the talent experience across the talent lifecycle. There will be an increased focus on personalisation based on different talent personas, continuous real-time listening and use of advanced analytics for insights.



Building a consumer-grade experience will also drive the need for personalised career journeys, enhanced candidate and onboarding experiences as well as innovative learning pathways. The **Talent Management**, **Talent Attraction** and **Learning** functions will need to redefine and implement processes, programmes and technology solutions that support these new demands from talent and the business.



There will be an increased expectation from the **Performance & Rewards** function to deliver personalised and differentiated programmes to cater to the needs and preferences of diverse talent groups. To enable agile organisation structures, there will be a need to design systems that provide real-time, teambased, multi-source performance feedback and differentiated rewards.



As organisations undergo digital transformation, the **HR Business Partners** will need to lead job redesign and strategic workforce planning initiatives, and work with the business to drive change management.



This business transformation will also be supported by **Organisation Development** who will spearhead initiatives to build an agile organisation culture and promote the right values and behaviours that will unify the organisation.

All functions will be expected to leverage evidence-based insights to influence business leaders on talent decisions. The analysis of the impact of technology on HR functions and jobs as well as the evolution of expectations and skills are detailed in the sub-sections below.



Section 4.1:

Impact of technology on the Chief Human Resource Officer

The role of the Chief Human Resource Officer (CHRO) is critical in leading the transformation across the HR function.

Today, the role is responsible for the effective and efficient running of the HR function. The role also drives the organisation culture and provides strategic foresight to solve organisational talent issues.

Figure 21 summarises the key demands of a CHRO arising from the 5 themes [22] identified earlier. More details are captured in the following paragraphs.

Figure 21: Impact of the five themes on the CHRO

01

Enhance Jobs and Drive Transformation

Strategise and **architect future of work** in the organisation and drive organisation transformation and agility.



Equip Workforce with Future Skills

Orchestrate a culture of continuous reskilling and upskilling to future-proof the organisation and groom future leaders.



Build Consumer-Grade Experiences

Be a **people advocate and business advisor**, and coach senior leaders to drive talent experience.



Digitalise HR

Be an **innovator** and drive the shift in HR to enhance service delivery and experience through technology investments.



Drive Data-based Decision Making

Drive infrastructure investments and capability across HR to enhance evidence-based decision science.

Overview of Chief Human Resource Officer (CHRO) role

The Chief Human Resource Officer will be the value creator and will partner with business leaders to identify future capabilities required to shape the long-term business goals and strategise the future of work. The role will evaluate opportunities for optimal human-machine combinations across the organisation and guide leaders to balance potential value against social implications of adopting technology. With the increasing importance of Environmental, Social and Governance (ESG) metrics in measuring business performance, the CHRO will need to advocate for sustainable business practices that balance the interests of multiple stakeholder groups including employees.

The CHRO will lead the creation of meaningful jobs and drive a culture of continuous learning in the organisation. The role will **articulate the desired culture** that aligns with business strategy, organisation values and the new ways of working. The role will **coach senior business leaders** as well as **groom future leaders** for the organisation. The CHRO will serve as a **talent advocate** to elevate the people agenda for diverse groups of talent.

The CHRO will develop a strategic vision for HR technology and drive alignment with the organisation-wide digitalisation strategy. The role will act as a **technology evangelist** and drive the vision for continuous upgrade of service delivery and experience by evaluating opportunities and prioritising HR technology investments. The role will also drive the **upskilling of HR teams** to embrace technology. The role will lead the shift from data reporting to **decision science** to catalyse future-focused insights for talent decisions.

Skills required by a CHRO

The CHRO will need to be proficient in driving organisation transformation through enabling agile organisation structures, optimal human-machine collaborations and leading culture change. The CHRO will also need skills to create a desired workplace culture and understand behavioural levers that drive positive

change. Skills in providing strategic business and HR advisory will be crucial for the CHRO to coach senior leaders. Talent experience and design thinking skills will be desirable to influence business decisions and create a seamless and integrated talent experience that aligns with the organisation's branding and consumer experience strategy. These skills have been described in detail in Figure 22 below.

Figure 22: Role-specific future skills for CHRO

Focus areas	Description
Organisation Transformation	Drive organisation transformation strategies and programmes that impact organisation-wide structures, processes, behaviours, in alignment with business strategy, workforce trends and disruptive technologies and enhance organisational effectiveness and performance.
Workplace Culture and Change Management Advisory	Drive strategies to achieve desired organisational culture by leveraging understanding of social drivers in the organisation and coach organisation leaders to lead change management across the organisation.
Strategic Business and HR Advisory	Coach organisation leaders and provide data-driven insights on opportunities by leveraging data analytics to influence and align talent strategies to business needs.
Talent Experience Management	Influence business decisions to drive a seamless and integrated talent experience that aligns with overall branding and consumer experience strategy of the organisation.
Design Thinking	Influence development of talent programmes through human-centred strategies for enhanced talent experience.
Behavioural Drivers	Provide thought leadership to drive application of behavioural levers to drive culture and workplace transformation.
Sustainability and Digital Citizenship Governance	Foster an inclusive and ethical workplace culture that enables organisation to make a positive impact on the environment, community, society, and economy. Oversee the development of policies and guidelines for corporate and digital citizenship to safeguard business and talent.
Work Architecture and Job Redesign	Strategise work architecture by driving job redesign and lay the foundation for future workforce planning including the broader talent ecosystem.
Learning and Development Strategy	Foster a continuous learning culture to drive upskilling and reskilling across diverse talent groups to meet current and future needs of the organisation.

Call to action for CHROs

As the leader of the HR function, the CHRO plays a critical role in driving transformation. The CHRO can leverage interventions detailed below to elevate the potential of HR within their organisations:

(\$)

Drive investments for HR technology

Technology can potentially elevate the performance and productivity of HR. It automates routine processes and frees up capacity for HR teams to take on strategic responsibilities. It also provides personalised solutions that enhance the talent experience.

To justify the investments, the CHRO needs to build a strong business case. This can be done by tracking quantitative metrics on productivity and performance and balancing these outcomes against the implementation cost of HR technology solutions.



Elevate capabilities of HR teams

Technology is augmenting the job responsibilities of HR professionals. This requires HR professionals to build new capabilities to stay relevant and perform in the job. The CHRO needs to drive a continuous learning culture within HR and motivate upskilling / reskilling. They can proactively encourage HR teams to leverage formal training programmes or IHRP certifications to build required capabilities needed for success.

Role of the CHRO beyond three years

The CHRO will continue to drive the evolution of work and talent strategy. The role will design higher-value human centric jobs through optimal combinations of humans and robots.

There will be continued focus on being an advisor or coach to organisation leaders, providing guidance to help them navigate potential conflicts between the commercial mandate and ethical responsibilities towards employees and communities.

The role will be a stronger talent advocate for diverse employment relationships and drive reskilling and upskilling across the organisation.

Finally, to help the business navigate the complexities of the changing landscape, the CHRO will be required to design purpose-driven work that allows talent to create a positive impact on society and foster a sense of belonging to the organisation.



Section 4.2: Overview of impact on the Operations and Technology function

Key trends impacting the Operations and Technology function

- ▶ Enhance efficiency of HR service delivery through intelligent automation.
- ▶ Design the data architecture for HR and enable advanced analytics to drive data-based talent outcomes.
- ▶ Enable the design and development of an integrated technology roadmap through use of cloud-based platforms.

Implications on job roles

Spend less time on... Spen

Technology will enable these roles to...

- Conducting system maintenance periodically.
- Monitoring compliance of data practices.
- ✓ Transaction processing.
- ✓ Routine query handling.
- ✓ Data reporting.

Spend more time on...

- Planning of solutions design and implementation.
- Experimenting with technology solutions and recommending scalable technology.
- User-centric design to maximise user experience.
- Presenting business cases for technology implementation.
- Formulation of data governance framework.
- ✓ User testing of solutions.
- Data analysis and results visualisation.

High	Medium	Low
Executive / Associate	HeadManager	

Overview of Operations and Technology function

The Operations and Technology function has traditionally focused on providing HR services. The jobs in the function are involved in system maintenance. processing, query handling, transaction reporting and ensuring data compliance etc. In larger organisations, with use of HR Information Systems (HRIS), there is greater efficiency of transaction processing through the system. As technology enhances the efficiency of service delivery, jobs in Operations and Technology function will spend less time on query handling, data reporting and conducting routine maintenance of these systems, as highlighted in the table above.

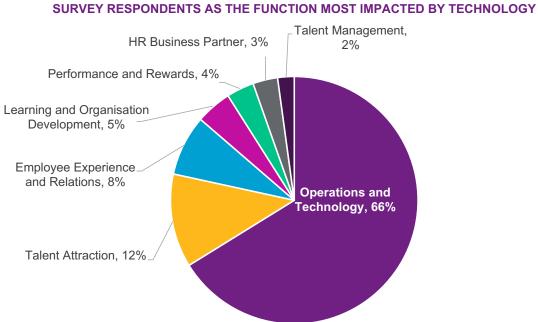
Today, in more progressive organisations, the function drives the enhancement of HR's technology capabilities by designing an integrated technology roadmap and data architecture for HR. In future, the Operations and Technology professionals will continue to experiment with technology to identify solutions to digitalise the delivery of HR services and enhance user experience. They will implement technologies such as Robotic Process Automation (RPA) and Artificial Intelligence (AI) that optimise HR infrastructure and service delivery. They will also need to develop and

showcase the business case for technology investments. This will require them to develop a seamless interface between HR and business systems. to enable the data flows needed for people analytics to support wider business decision making.

Technology impacting Operations and Technology function

research has identified Operations and Technology as the HR function most impacted by technology and was chosen by two-thirds of all respondents in the survey as shown in Figure 23 below. HR technology solutions increasingly offer opportunities for enhancing service delivery and user experience. Operations and Technology professionals will be the key enabler for technological change within the HR function. They need to build knowledge of the latest technology solutions and develop a business case for suitable technologies that can be implemented across HR processes to drive business outcomes. From our survey findings, the top technologies impacting the function were data analytics, AI and machine learning, RPA and cloud technology. These technologies will have implications on the top trends impacting the Operations and Technology function which will be elaborated in the following section.

Figure 23: Function most impacted by technology



OPERATIONS AND TECHNOLOGY FUNCTION WAS RANKED BY 66% OF

Our research identified the following technology trends impacting the Operations and Technology function:



Intelligent automation (comprising RPA, Al and machine learning) has enhanced efficiency of HR service delivery. Such technologies enable automation of routine, administrative tasks. and transactional processes such benefits and leave as administration. 88% of industry participants in our survey indicated that all Operations and Technology processes have moderate to strong potential for automation. However, the effectiveness of intelligent automation can only be maximised if existing processes are reviewed and optimised before introducing the appropriate technology. One such area is firstline guery handling, which can be automated through AI, by generating responses based on defined algorithms. With the availability of such technologies, it provides opportunities for the Operations and Technology function to assess whether traditionally outsourced processes can be moved in-house.



There is an increased focus on data analysis across all business functions, and HR is no exception. Advanced data analytics, including codification of intangible metrics, such as analysis of talent feedback via informal communication platforms, is critical in providing key insights to the business to drive talent decisions. Data analytics will greatly impact HR operations and tasks in the next three years according to our research. With the advent of technology, data storage and collection capability has gone up significantly. The function is expected to leverage this to enhance analytics capabilities of the HR function. It will also be expected to design data architecture that allows analysis of linkages between talent data and business metrics, in order to drive data-driven decision making. With sensitive employee information being collected and analysed, the Operations

and Technology function also needs to develop a data governance framework and ensure data security measures are in place. This will include data privacy guidelines to manage the collection and use of sensitive personal data.



Cloud-based platforms enable seamless access to HR systems and sharing of data. They provide a strong foundation to implement different systems to enhance HR service delivery, user experience and analytical capabilities. Operations and Technology professionals can enable this by designing integrated technology roadmaps seamless interface across various HR systems such as performance management, learning and development, career development, etc. With a reduction in time spent on manual and transactional processes, the function is expected to operate with greater efficiency.

The following section discusses the enhanced expectations in Operations and Technology roles.

Head, Operations and Technology

The Head, Operations and Technology will collaborate with the Chief Information Officer (CIO) to develop an integrated HR technology roadmap to ensure synergy across HR technology solutions. This will involve developing technology implementation strategies and recommending solutions that enhance service quality, talent experience as well as better integration across the various technology solutions. The Head, Operations and Technology is expected to make decisions on the type of technology solutions required by the organisation, whether to purchase or develop these solutions, and make a business case to secure the necessary funding. The role will plan and design the HR data architecture to ensure seamless flow of data across HR and business systems and drive the use of data analytics to influence key stakeholders on talent decisions. In terms of data security and governance,

4. Overview of HR Functions

the role will define the data security requirements and develop data governance frameworks, and lead the implementation of measures to protect sensitive and confidential data.

There will be a medium level of impact of technology on the Head, Operations and Technology. The enhanced job scope to design an integrated HR technology roadmap will require new skills and knowledge of new technologies and implications on data architecture for HR. The role will also need to lead the HR digital transformation and technology adoption across the function.

Manager, Operations and Technology

The Manager, Operations and Technology will lead the implementation of technology solutions and manage the organisation's HR technology portfolio. This involves identifying relevant metrics to analyse and ensuring continuous improvement across solutions, evaluating HR technology solutions in the market, and recommending HR technology solutions for adoption in the organisation. This requires a strong understanding of data models to recommend talent-related metrics based on the needs of the business and other HR functions. The Manager, Operations and Technology will also work with stakeholders (e.g. IT team) to implement a seamless data architecture with strong data security measures and data governance.

There will be a medium level of impact of technology on the Manager, Operations and Technology. Intelligent automation (AI and ML embedded within cloud-based solutions) will enable real-time, automatic updates of compliance information. The job scope will evolve to explore opportunities for optimisation of current HR processes, and to implement and manage the technology portfolio across HR.

Executive / Associate, Operations and Technology

Many of the current tasks of the Executive / Associate, Operations and Technology are at high risk of displacement with the automation of transaction processing and front-line query handling processes. The role will evolve to support technology implementation and research on new technology solutions in line with the integrated technology roadmap and process improvements. The role will also support the implementation of technology solutions, including product testing and communicating changes to relevant stakeholders. The role will support the data analysis of various talent and business metrics by developing data visualisation dashboards to present insights that influence talent decisions.

There will be a high level of impact of technology on the Executive / Associate, Operations and Technology. The role will undergo a considerable change in the job scope as several tasks are replaced by intelligent automation. The role will be expected to undertake new areas of work such as collaboration with technical teams to outline technical requirements for HR technology solutions. Additionally, new technology-related skills, such as **robotic process automation** (RPA) **programming** will be needed in future, leading to a high level of impact due to technology.



Skills required by Operations and Technology professionals

The Operations and Technology professionals will be expected to be proficient in **integrated technology roadmap development** to drive technology implementation. proficiency in **application programming interfaces (APIs) design** and RPA **programming** will be crucial to enable use of off-the-shelf technology solutions and integration of solutions in line with the technology roadmap and business needs. Operations and Technology professionals also need to have strong skills in **data architecture design** and

data security and privacy to ensure robust and effective data flows that link HR and business systems as well as to protect confidential and sensitive data. To maximise consumer-grade experience and enhance the functionality and effectiveness of technology solutions for HR service delivery, Operations and Technology professionals require user experience / user interface design and product testing skills. Technology vendor management abilities would also be key, as the function is expected to collaborate with different technology vendors to drive technology implementation. These skills have been described in detail in Figure 24 below.

Figure 24: Role-specific future skills for Operations and Technology professionals

Focus areas	Description
Integrated Technology Roadmap Development	Design organisation technology roadmap strategy to drive seamless interface between existing and upcoming technologies and optimise HR systems, and enhance accessibility and functionality for talent and business.
Application Programming Interfaces (APIs) Design	Drive integration of various applications and platforms across organisation-wide systems to design the interactions between various software components and maintain an overview of routines and communication protocols regarding these interactions.
Data Architecture Design	Lead the design of a robust data architecture that seamlessly directs data flow across the organisation
Data Security and Privacy	Adopt an overarching view of tools and approaches for data security and privacy such as privacy-by-design to design data governance framework and drive compliance with regulatory requirements and prevent business and reputational risks from data breaches.
User Experience / User Interface Design	Formulate guiding principles and concepts for intended user experience and interfaces, and direct development of prototypes and customised graphical user interfaces to anticipate user requirements and adopt industry best practices.
Product Testing	Evaluate results of testing for digital products and services, and develop technology implementation strategy that enhance feasibility, functionality and effectiveness for optimal product experience for business and talent.
Technology Vendor Management	Establish strategic collaborative and impactful partnerships that take into consideration the long-term mutual benefits for both organisation and technology vendors to drive technology transformation across HR.
Robotic Process Automation Programming	Evaluate HR processes against RPA technology to define opportunities as well as prioritise HR processes for automation based on business organisation and talent needs.

Case Studies

The case studies below showcase the impact of the technology and on the HR Operations and Technology function in various organisations.

Singapore University of Technology and Design (SUTD)



A lot of the other functions like finance, operations and marketing have traditionally been using data to make decisions. Well, HR professionals now have to learn to be a lot more data-savvy to be able to make more objective decisions. ""

Dr. Jaclyn Lee, CHRO, SUTD

The business need



SUTD is one of the universities in Singapore that aims to be a leading research-intensive global university that focuses on technology and design. HR has traditionally been aligned with the 'soft' sciences of psychology and sociology and has been seen to lack the data-savviness to make objective decisions. As the talent needs in the organisation are becoming more complex, it is imperative to transform the HR function from relying on 'gut instincts' to utilising data-driven insights for decision making.

The solution

- The HR function deployed cloud-based systems and undertook several automation initiatives across the various HR functions, to meet the varied needs of each function, e.g. adopted automation for new employee onboarding and information entry into our core HR system was manual process.
- · Enabled transformation of operational HR roles to deliver more value-add through effective roles such as Business Partnering, Strategic HR and Organisation Development.
- · Embarked on a large-scale data management and cleansing initiative in order ensure that the data analysis would give accurate insights, e.g. Automation of the resourcing function in SUTD HR allowed the auto-validation of data and prerequisites.
- Upskilled 14 HR FTEs in analytics and visualisation training to perform data analytics and derive insights based on the HR information systems. It allowed HR to develop skills in proactively identifying data patterns and developing data-driven insights and linkages to business metrics to identify impact of HR programmes and talent metrics on business outcomes. Utilised Qliksense platform for data analytics and derive insights that allowed data-driven talent decisions to support the business. E.g. analytics and insights solved issues related to recruitment, manpower capabilities needed in the near future, identified employees with potential flight risk etc.

The results



- Cloud-based systems enabled SUTD to save on infrastructure and regular upgrade costs as well as reaping intangible benefits such as:
 - ▶ Better applicant and employee experience.
 - ▶ Shift towards becoming a strategic HR function.
 - ▶ Ease of use, less training needed.
 - ▶ Increased HR tech innovation.
- · At least 76 man-hours were saved in FY18 on recruiting & onboarding process in HR.
- · 60-70% of manual work in the resourcing function in HR was automated.
- · Real-time data and dashboards in a consolidated view allowing for data-driven insights which enabled workforce planning and cost efficiency as well as hiring of better candidates which saved costs on headhunting.

The Lo & Behold Group



We envision that the acquisition of and implementation of an integrated, unified, consumer-grade UX platform such as Workday, across Human Resources (HR) will enhance the employee experience. ""

Fiona Lai, Chief Talent Officer, The Lo & Behold Group

The business need



The Lo and Behold Group is continuously exploring opportunities to expand and scale operations. To support the growth of business with the existing headcount in HR, it was important to invest in technology to enhance efficiency of HR service delivery and hence meet the growing needs of the evolving business. The investment in Technology solutions is also timely towards how we operate in the "new normal" as we progressively phase our return from this Covid-19 circumstance.

The solution



- Implemented an integrated, unified, cloud-based platform across Human Resources. This platform aims to help:
 - Automate the administrative tasks and transactional tasks within Human Resources.
 - ▶ Provide an "on-the-go" access to HR services such as attendance management, personal particulars, and time-off applications.
 - ▶ Perform basic analysis and reporting functionalities.
- Due to the time saved by automation of administrative and transactional tasks, HR focused time on
 predictive analysis to draw linkages to business outcomes for talent decisions i.e. using predictive
 analytics to identify employees with high flight-risk and retaining or redeploying them would help to
 save the cost of recruiting and onboarding a new hire.

The results



- Integrated platform reduced amount of highly administrative and transactional work, allowing reallocation of time into important strategic activities.
 - We've managed to reduce down manual time-off tracking and administration by 40%.
 - Candidates are able to complete their on-boarding information once they are hired into the system.
 - Talent Acquisition team is able to better able to focus on qualifying their talent bank.
 - Approximately 30 manhour per HR staff per month saved,

Technology

will enable

these roles

to...

Section 4.3: Overview of impact on the Performance and Rewards function

Key trends impacting the Performance and Rewards function

- Enhance efficiency of routine performance and rewards processes through intelligent automation.
- ▶ Enable personalised performance management and rewards through mobile applications.
- Leverage data analytics and behavioural economics to attract, motivate, and retain key talent.

Implications on job roles

Spend less time on...

- Administering the performance management process.
- Administering compensation and benefits.
- Consolidating data and generating reports.
- Gathering employee feedback on programmes manually.
- ✓ Documenting improvement plans.
- Liaising with vendors.
- Handling routine queries on compensation and benefits matters.

Spend more time on...

- Analysing talent data for insights on needs and preferences for pay and benefits.
- Designing and implementing continuous multi-sourced performance framework.
- Designing and implementing agile and personalised rewards solutions.
- Developing personalised and bite-sized communications.
- Scouting for appropriate technologies and approaches.
- Analysing data to evaluate effectiveness of performance and rewards programmes and linkages to business outcomes.
- Resolving complex queries on compensation and benefits matters.

High	Medium	Low
ExecutiveAssociate	HeadManager	

55

Overview of Performance and Rewards function

The Performance and Rewards function is responsible for the development and implementation of performance management and rewards frameworks. Traditionally, there has been a focus on standardising these frameworks for and adopting a one-size-fits-all approach across the organisation, without considering different needs, preferences as well as differentiated skills. Additionally, considerable time was spent on administering performance management processes as well as compensation and benefits. Performance and Rewards professionals also spent time on data consolidation, report generation and handling employee queries.

With the need for delivering an enhanced consumer-grade experience, the function needs to build frameworks and approaches that leverage real-time, continuous and multi-sourced feedback to offer agility, differentiation and flexibility. There is also a stronger focus to enable goal setting, coaching, evaluation and feedback throughout the year. Performance and Rewards professionals will be expected to analyse performance data and draw linkages to business outcomes to ensure that new performance and rewards policies drive greater productivity.

With the workforce becoming more diverse, there is a greater need for the Performance and Rewards professionals to also understand the needs and preferences across diverse talent groups. Analysis of behavioural levers including psychological, cognitive, emotional, cultural and social factors on economic decision making will be used to determine the impact of pay elements on attraction, motivation, and retention. This will enable Performance and Rewards professionals to design agile and personalised rewards solutions, which include elements of skills-based pay, incentive pay, and flexible benefits programmes for diverse groups of talent.

Technology impacting Performance and Rewards function

Our research indicates that data analytics, mobile applications, cloud technology, RPA, AI and machine learning are the technologies that will most impact the Performance and Rewards function in the next three years. These technologies will enhance the function's ability to collect real-time data and develop insights for performance and rewards decisions. They also allow talent greater flexibility, personalisation and access to rewards and benefits programmes. Overall, this will enable the function to provide holistic and flexible performance management, rewards, and benefits and wellness frameworks for diverse talent groups.

According to our survey, some of the function's processes that are most likely to change in the future due to technology, are shown in Figure 25 below.

Figure 25: Top five performance and rewards processes most likely to change in the future due to technology

Performance and rewards processes	Rank order
Market benchmarks and comparator groups analysis	1st
Analysis of effectiveness of existing rewards programmes	2nd
Cross-functional roles	3rd
Supporting the performance management process in the organisation	3rd
Calibration of performance grades	5th

4. Overview of HR Functions

Our research identified the following technology trends impacting the Performance and Rewards function:



Intelligent automation such as Al and machine learning technologies are increasingly being used to enhance the efficiency of many performance and rewards processes. RPA will automate the administration of performance management process and benefits administration. Alpowered systems and machine learning will automate the process of verifying accuracy of data and claim submissions as well as documentation of performance management action plans and results. First-level guery handling of performance and rewards matters will be facilitated by Al-powered chatbots. Consolidation of talent data and feedback on benefits programmes will also be automated by RPA. Performance and rewards reports can also be automatically generated through RPA. Al-powered systems and machine learning. These technologies will reduce time spent on such tasks, allowing the function to perform more analysis and value-added work.



The rise in talents' expectations for HR to deliver consumer-grade experiences and personalisation has led to a steady increase in the use of **mobile applications**. Combined with cloud-based platforms, mobile applications enable multi-sourced and real-time feedback. Mobile applications embedded with nudging capabilities will send alerts to enable personalised and frequent performance assessment. Mobile applications will also allow talent easy access and personalisation of rewards and benefits as well as submission of claims.



There is an increased focus on the function to utilise **analytics** to develop data-driven performance and rewards frameworks. From our research, data analytics ranks as the top technology that will impact the function in the

next three years. Advanced data analytics will enable the function to generate insights on talents' preferences for various pay components as well as establish linkages between performance data and business outcomes. Sentiment analysis of intangible metrics such as organisation network analysis, talent morale, will provide innovative elements for performance and rewards decisions. The function will also be expected to utilise behavioural economics to design and implement compensation and benefits frameworks. The function will need to take into consideration psychological, cognitive, emotional, cultural and social factors when designing compensation and benefits programmes. This will enable the function to implement agile and personalised rewards of greater economic value to better acquire. motivate and retain talent.

The following section discusses the enhanced expectations in Performance and Rewards roles.

Head, Performance and Rewards

The Head, Performance and Rewards will guide the design of an agile, personalised, differentiated and flexible rewards framework by incorporating real-time, frequent, and multi-sourced feedback. The role will also be expected to develop a strategy for continuous performance management. The Head, Performance and Rewards will drive the adoption of these frameworks and ensure effective application for diverse talent groups. Developing an executive compensation philosophy as well as overseeing compensation governance strategies to advocate greater transparency in remuneration practices will also be expected. The role will advocate for and drive the use of data analytics and behavioural drivers to examine the impact of rewards on talent attraction, motivation, and retention.

There will be a medium level of impact of technology on the Head, Performance and Rewards. The enhanced job scope to develop performance

and rewards frameworks that are agile, flexible, and personalised, will require the role to gain proficiency in agile and personalised pay philosophy and structures. Additionally, new areas of focus for the role include a greater need for analysis of intangible metrics as well as behavioural drivers that will enable the design of holistic rewards policies for the organisation.

Manager, Performance and Rewards

The Manager, Performance and Rewards will focus on implementing agile, personalised, differentiated and flexible performance and rewards frameworks that meet the needs of diverse talent groups and the business. The role will develop personalised communication for diverse talent groups on the adoption of these frameworks. The Manager, Performance and Rewards will lead the use of technologies to deliver the differentiated and personalised compensation and benefits as well as multi-sourced performance feedback. The role will be expected to utilise data analytics to enhance programmes and analyse the impact of various pay components on behavioural drivers related to talent attraction, motivation, and retention.

There will be a medium level of impact of technology on the Manager, Performance and Rewards. The role will be expected to gain new technology-related skills such as technology-driven evaluation and levelling to augment the area of work in job evaluation and benchmarking. The use of data analytics will be even more prevalent for the role to analyse intangibles and assess the impact of rewards and benefits and wellness programmes on talent.

Executive, Performance and Rewards

The Executive, Performance and Rewards will facilitate adoption of enhanced performance management, compensation and benefits frameworks by supporting the development of personalised and

bite-sized communications to talent. The role is expected to research new technologies and conduct user acceptance tests for the technology to deliver the required talent experiences on performance management, compensation and benefits programmes. The role is also expected to analyse talent feedback and suggest solutions for addressing gaps in performance management, compensation and benefits programmes. The Executive, Performance and Rewards will be expected to articulate the rationale and objectives of variable pay mechanisms as well as job evaluation and benchmarking approaches. Creating compensation and benefits benchmarks through use of technology, that enable analysis of pay equity across various talent groups, as well as implementing holistic benefits and wellness programmes will be expected of the role.

There will be a high level of impact of technology on the Executive, Performance and Rewards. The administration of compensation and benefits will be fully automated by technology. First-level query handling, verification of claim submissions as well as data accuracy checks in reports will be performed through intelligent automation. The role will undertake new areas of work such as analysis of feedback and metrics as well as user acceptance tests to enhance delivery of performance management, compensation and benefits programmes through technology. These areas will be supported by the gaining of new technology-related skills such as people analytics.

Associate, Performance and Rewards

The Associate, Performance and Rewards will support the communication of frameworks and programmes, including supporting the resolution of complex queries. The role will also research various technologies and support user acceptance testing for new technology applications. The role will additionally support data analysis of performance and productivity metrics. The role will be expected to support the analysis of compensation and benefits practices in the industry to suggest innovative practices that address business issues. The role will analyse talent data to understand the needs and preferences across talent groups and support the curation of benefits and wellness programmes.

Associate, Performance and Rewards

The Associate, Performance and Rewards will support the communication of frameworks and programmes, including supporting the resolution of complex queries. The role will also research various technologies and support user acceptance testing for new technology applications. The role will additionally support data analysis of performance and productivity metrics. The role will be expected to support the analysis of compensation and benefits practices in the industry to suggest innovative practices that address business issues. The role will analyse talent data to understand the needs and preferences across talent groups and support the curation of benefits and wellness programmes.

There will be a high level of impact of technology on the Associate, Performance and Rewards. The administration of compensation and benefits will be fully automated and intelligent automation will handle queries on compensation and benefits matters, administer reimbursement and generate reports automatically. The collation of employee data and feedback on benefits schemes will also be automated. This will allow the role more time to take on new tasks such as supporting research initiatives as well as the curation of holistic benefits and wellness programmes. The role will be

expected to upskill and acquire new technology-related skills such as people analytics and HR technology adoption to perform the new tasks.

Skills required by Performance and Rewards professionals

The Performance and Rewards professionals will be expected to be proficient in design and implementation of continuous performance management frameworks. This will enable a shift in performance management mindsets and practices to become more agile and forward-looking, and to instil a learning culture where talent contribute to the growth and development of others by providing timely feedback. Skills in developing agile and personalised pay philosophy and structures and use of technology-driven evaluation and levelling will enable Performance and Rewards professionals to better manage and reward agile teams and a diverse workforce. Proficiency in understanding and application of behavioural drivers to develop personalised and differentiated pay elements to attract. motivate and retain talent while balancing cost. Lastly, as compensation practices become more progressive and move towards greater transparency, Performance and Rewards professionals will also require skills in compensation governance. These skills have been described in detail in Figure 26 below.

Figure 26: Role-specific future skills for Performance and Rewards professionals

Focus areas	Description
Continuous Performance Management	Design continuous performance management strategy and framework to account for real-time feedback and spearhead continuous dialogues and ongoing performance review strategies for agile team structures and diverse talent groups.
Agile and Personalised Pay Philosophy and Structures	Lead design and implementation of agile, personalised, and flexible pay philosophy and structures to enable flexible incentives and adaptability for compensation of diverse talent groups aligned to organisational needs.
Technology-driven Evaluation and Levelling	Lead the development of an innovative approach with technology integration for evaluation and levelling of redesigned jobs.
Behavioural Drivers	Provide thought leadership to shape and promote best practices within the organisation on the use of behavioural levers and pay elements to drive enhancement of compensation and benefits strategy.
Compensation Governance	Establish compensation governance frameworks and strategies integrated with technology to enhance compliance with compensation disclosure requirement and promote transparency of compensation practices.

Case Studies

The case study below showcases the impact of the technology on the Performance and Rewards function in an organisation.

Oversea-Chinese Banking Corporation (OCBC Bank)



We adopt digitalisation to enhance the employee experience so that we deliver a high service level to our employees, whom we look upon as our main 'customers'. Having the right digital tools and processes is key so that we can serve our people better.

Jason Ho, EVP and Head of Group HR, OCBC Bank

The business need



OCBC Bank is the longest established Singapore bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. It is now the second largest financial services group in Southeast Asia by assets and one of the world's most highly-rated banks, with an Aa1 rating from Moody's. The financial industry has seen significant technology-led changes in the last few years. To remain competitive, OCBC Bank needed to define a digital transformation strategy that not only focused on redefining customer experience but also an enhanced employee experience. To this effect, the HR team redefined the transactional processes and introduced employee-centric benefits programmes to empower employees and enhance employee experience.

The solution

- HR launched MyWellness, a benefits portal and app that empowered employees to
 choose the best coverage for themselves and their families, creating a wellness journey
 that best suits their life stages and personal goals. Employees were provided the flexibility to
 customise their benefits to meet their own needs through flex dollars issued by the bank. It is a
 digital one-stop app that:
 - Allows employees to personalise their benefits to individual life stage and health needs, improve their health or submit a medical claim on the portal that is mobile-responsive and available 24/7.
 - ▶ Uses the Face Ageing tool and a 5-minutes questionnaire on lifestyle choices to assess individual's health risk. Insights to areas which are satisfactory or unsatisfactory are be generated based on the results, providing tips unique to the individual.
 - ▶ Empowers employees to buy wellness-related products or sign up for fitness classes at their own convenience. It empowers employees to take charge, track and improve their own wellness.
- The above app was built on the back of analysis done by a collaborative team comprising of HR Analytics, Compensation & Benefits and more. The team analysed utilisation patterns across the different employee age groups over the duration of a five-year period and studied medical spend, preventative health screenings and flex dollars spend. With the insights on employees' preferences, existing schemes were enhanced. For example, when it was identified that older employees needed more coverage claims for their parents' medical expenses and hence the medical coverage was extended to parents of all employees.
- HR also designed a mobile application with a first-of-its kind system-integrated chatbot (in-house built chatbot engine Buddy), called HR in Your Pocket (HIP) which provides a seamless access, in the office and on-the-go, for managing transactional HR processes such as leave applications, tracking medical and lifestyle expense reimbursement claims, internal job postings and people directory. The application is powered by an Artificial Intelligence (AI)-driven chatbot that is integrated with OCBC's HR information system. The app streamlines internal process flows and drives paperless and digitalised transactions and the chatbot provides immediate and personalised responses, leading to an enhanced employee experience. Its desktop twin, My World, mirrors HIP so employees are guaranteed a seamless employee experience.

The results



- The HIP Al-powered chatbot, saved up to 114 staff-days in the first 6 months of launch.
- Out of the almost 80,000 claims, 76.5% of claims were made through mobile between 1 January 2017 and 31 January 2018.

Technology

will enable

these roles

to...

Section 4.4: Overview of impact on the HR Business Partner function

Key trends impacting the HR Business Partner function

- ▶ Partner with the business to conceptualise work architecture through intelligent automation.
- Enhance talent experience through use of mobile applications and communication platforms.
- ▶ Leverage data analytics to determine future workforce and skills required, drive talent decisions and recommend personalised, talent-centric approaches to manage talent.

Implications on job roles

Spend less time on...

Planning for short-term deployment of workforce.

- Implementation of standardised talent management frameworks and processes.
- Supporting HR operations for the business.

Spend more time on...

- Leveraging data analytics to develop industry scans and insights on future workforce and skills required.
- Developing future focused strategic workforce plans including the broader talent ecosystem.
- Driving job redesign initiatives to optimise long-term productivity.
- Guiding business leaders on talent-centric approaches and personalised solutions through data-driven insights.
- Enhancing the talent experience across talent lifecycle.

High	Medium	Low
	■ Head	Manager

Overview of HR Business Partner function

The HR Business Partner (HRBP) function is a strategic role within organisations to provide people advisory to the business units in order to drive the business outcomes. Organisations typically deployed HRBPs within business units to drive collaboration with the business by providing advice on HR and talent strategies to meet business needs. However, in practice the HRBPs spent a large proportion of their time focusing on the implementation and operational aspects of talent management for the business.

Technological advancements are enabling the HRBP function to have more time to focus on its intended strategic work. Our engagements with business and HR leaders highlighted their expectations for this function to become more strategic and be a consultative partner for the business. The function is expected to utilise datadriven insights to guide leaders on talent investments to future-proof the business. HRBPs will be expected to enhance long-term productivity across the business through strategic workforce and capability planning by leveraging the broader talent ecosystem and lead job redesign initiatives. From our survey findings, business leaders highlighted that one of the key expectations for HR is to deliver value-added service in the area of job redesign as a result of the impact of technology (see Figure 27).

The HRBP function will be responsible for driving the talent experience across various processes in the talent lifecycle from talent acquisition, onboarding, engagement, development, offboarding to manage the talent. This will be done by leveraging

data-driven insights to guide the business on talent interventions that enhance flexibility and personalisation of talent solutions aligned with business needs.

Technology impacting HR Business Partner function

Our research indicates that technologies such as data analytics, Al and machine learning, social media, social robotics, and mobile applications will impact the HR Business Partner function the most in the next three years. Other technologies such as Al-driven tools and social robotics are already automating first-level query handling and reducing the administrative burden for HRBPs. HRBPs will therefore be able to focus on strategic work and become better advisors to enhance business productivity and using data insights to make informed talent decision and drive business outcomes.

Our research identified the following technology trends impacting the HR Business Partner function:



There will be increased emphasis on partnering with the business to identify key business outcomes and related talent needs. The function will conceptualise work architecture in partnership with the business to optimise delivery of work. HRBPs will work closely with the business to incorporate the use of intelligent automation such as **RPA**, **AI** and **machine learning** in relevant jobs as part of job redesign efforts. They will optimise long-term productivity of the business by identifying opportunities

Figure 27: Top three expectations of Business Leaders from HR & Top three human capital processes impacted by technology in the next three years

Business leaders expect HR to deliver value-added services in the areas of organisational design and job redesign

Business

	Leauers
Improving collaboration and information sharing	1
Redesign jobs so that they can only be done by employees with more skills	2
Increasing work flexibility (e.g., scheduled hours to get work done)	3

Job Design and Organisation Structure are also among the top three human capital processes impacted by technology

	Business Leaders
Recruitment	1
Job Design and Organisation Structure	2
Employee Engagement	3

4. Overview of HR Functions

for job redesign and technology integration in alignment with business transformation plans and required outcomes for the optimisation of human-machine collaboration.



Talent is increasingly demanding better experiences in the workplace and the HRBP function is expected to focus on enhancing the talent experience across the talent lifecycle and eco-system. This is enabled through use of consumer-grade communication platforms such as mobile applications and social media to deliver "moments that matter" and facilitate continuous engagement with the business and talent. These platforms embedded with Al-enabled nudging will also enable realtime multidirectional engagement and provide feedback for analysis to influence business decisions on talent and skills requirements. The function will drive the use of these platforms by the business to provide personalised, talentcentric approaches for managing their talent.



With increasing amounts of data being generated and stored, there will be an increased focus on the use of data analytics within the function. In our research, data analytics was ranked as the top technology that will impact the HRBP function. The HRBPs will make use of insights from workforce analytics platforms to determine future desired workforce structures and skills needed. They will develop strategic workforce and capacity plans that will leverage in-depth knowledge of the broader talent ecosystem and their capabilities to manage work requirements in an effective and agile manner. Organisational network analysis will also provide insights to HRBPs on collaboration and information sharing across the organisation to enhance the promotion of change initiatives. The HRBP function will use data analytics and predictive modelling based on real-time data to derive talent decisions such as flight risks and potential derailments of development programmes. Advanced data analytics will also enable linkages of talent metrics to business outcomes to demonstrate the impact of talent initiatives on business strategy and influence decisions on the talent initiatives. The insights obtained will enable the function to develop

the business case and challenge decisionmaking for talent and skills requirements and futureproof the business. Data analytics will also enable HRBPs to analyse and obtain insights on critical touchpoints such as "moments that matter", to help enhance talent engagement for the business.

The following section discusses the enhanced expectations in HR Business Partner roles.

Head, HR Business Partner

The Head. HR Business Partner will be expected to be the consultative partner for the business on HR and talent matters. The role will leverage datadriven insights obtained from real-time multidirectional engagement to advocate for, and challenge business leaders on talent investments. The role will also strategise work architecture by leading job redesign and strategic workforce planning initiatives as well as optimising human-machine collaboration for the enhancement of long-term productivity across the business. Advanced data analytics and predictive analytics will enable the role to link HR solutions to business outcomes and shape talent strategies in meeting long-term business needs. The role will guide and empower business leaders to become brand ambassadors for the organisation to promote employer branding and talent value proposition (TVP), Head, HR Business Partner will also provide advice to the talent acquisition team on onboarding journeys based on business and talent needs. The role will guide the development of HR policies as well as partner with the business to champion diversity and inclusion (D&I). Ultimately, Head, HR Business Partner will guide the business on talent interventions and influence business leaders to drive data-driven talent-centric solutions in line with business needs.

There will be a low level of impact of technology on the Head, HR Business Partner. The job scope for the role will remain largely unchanged, focusing on close collaboration with the business to develop strategic workforce plans and drive the design of work architecture. Nevertheless, the role will need to demonstrate a strong understanding of technology and the proficient use of insights in order to drive data-driven talent decisions and strategic advisory to the business as well as take on new area of work in job redesign.

Manager, HR Business Partner

The Manager, HR Business Partner will evolve from providing support for implementation of HR process to focus on advisory for talent issues through use of datadriven insights. Predictive analytics will enable the role to analyse future workforce capabilities in order to develop strategic workforce plans and ensure capabilities are sourced across the broader talent ecosystem. A core objective of the role will be to implement workforce plans and job redesign to optimise long-term business productivity. The role will also play a critical part to support HR in influencing change within the business. Technology will enable use of organisational network analysis to obtain insights on influencers within the business to promote change initiatives. The Manager, HR Business Partner will also engage senior business leaders to guide them on business decisions for future talent and skills requirements through performing data analytics to obtain data-driven insights. The role will recommend talent-centric approaches and utilise datadriven insights to provide inputs for HR policies that will enhance talent experiences as well as advocate D&I and manage talent behaviours within the business.

There will be a medium level of impact of technology on the Manager, HR Business Partner.

Automation of routine queries, communications and standardised HR processes as well as self-service HR delivery models will allow the role more time to focus on strategic advisory to the business through use of data insights, workforce planning and redesign of jobs. The role will also need to continually gain knowledge of new technology-related skills to conduct data analytics and optimise human-machine collaboration.

Skills required by HRBPs

HRBPs will need consultation skills such as strategic business and HR advisory to coach business leaders and link HR strategies to business needs. HRBP professionals will also strategise technologydriven talent assessment approach for the business and drive work architecture and job redesign to enhance organisation efficiency and capabilities. Talent experience management skill will allow HRBP professionals to drive strategies to enhance talent experience across talent lifecycle and promote the employer brand. With the growing importance to engage with talent continuously to drive change management and, reskill and upskill talent, HRBP professionals will need utilise omni-channel communication to strategise and deliver communication across multiple channels, and ensure an integrated experience through the change process. These skills have been described in detail in Figure 28 below.

Figure 28: Role-specific future skills for HR Business Partner professionals

Focus areas	Description
Strategic Business and HR Advisory	Coach business leaders and provide data-driven insights on opportunities by leveraging data analytics to influence and align talent strategies to business needs.
Talent Experience Management	Drive innovative strategies and solutions to enhance talent experience across the talent lifecycle considering different talent personas.
Technology-driven Talent Assessment Strategy	Strategise talent assessment approach to ensure seamless integration with technology solutions aligned with business needs and overall talent experience strategy.
Work Architecture and Job Redesign	Design work architecture and strategic workforce plans to guide job redesign and optimise human-machine collaboration across the business for enhancement of efficiency and capabilities.
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences.

Case Studies

The case studies below showcase the impact of the technology and on the HR Business Partner function across organisations

Fuji Xerox



I hold onto the belief that HR specialists' main emphasis should always be on developing people and honing their abilities. This also means to peg ourselves to the latest HR standard in the industry, which will motivate us to constantly seek new ways of streamlining processes.

Jacely Voon, General Manager of People, Culture and CSR, Fuji Xerox

The business need



Fuji Xerox is the world's leading provider of document services and printing technologies, using smart, pioneering devices and transformational solutions that drive business innovation to advance organisations for the digital future. In order for the business to stay ahead of the curve, Fuji Xerox embarked on a HR transformation programme that saw improved customer experience and operational excellence. To arrive at the desired state, Fuji Xerox plans to additionally deploy a new service delivery model that builds on HR becoming a business partner and addressing the needs of the business.

The solution



Fuji Xerox underwent a HR Transformation and implemented a HR Technology platform to enable the standardisation of HR processes.

HR regional service delivery model

- Defined HR roles and responsibilities with regional integration of Centre of Excellence and HR Shared Services functions.
- Alleviated HR's focus on administration by enabling employee and manager self-services through use of automation, to allow more time on value-added work.
- Improved employee & manager experience by providing a single, efficient point of contact for HR inquires and enhancing self-service and mobile capabilities.
- Implemented the HR Business Partnering model to help business leaders actualise greater value from HR initiatives.
- Transformed mundane, and manual ways of working through the adoption of the ERRC (Eliminate, Raise, Reduce and Create) framework to enhance efficiency and productivity.

Implementation of Oracle HCM Cloud

- Enabled HR to gain real-time access into workforce data, analytics, dashboards and insights
 which allowed HR access to data to provide inputs for quick decision-making and support business
 and talent needs.
- Reduced maintenance burden due to the use of a single integrated technology platform.

The results



- Increased productivity
 across HR and reduced
 the HR to Employee ration from
 1:120 to 1:74.
- Cost savings from labour arbitrage by \$2.8 million year-on-year over five years.
- Increased level of strategic HR services in support of the business through HR Business Partnering as well as increased transparency and timelines of key people data to drive strategic business decisions.
- Improved employee & manager experience with single and efficient point of HR inquiries and enhanced self-services capabilities.
- Increased time dedicated to talent management (performance management, career and succession planning, learning and development) and retention strategies which lead to reduction in turnover, decreased replacement costs and increased revenue per head.
- Increased capability and time spent on workforce planning which reduces revenue lost from shortage of skilled sales people / critical workforce.

Merck



Since we embarked on our journey, we can now really say that people analytics and data-driven mindsets forms part of the DNA of Merck Group. 33

Alexis Saussinan, Global Head of People Analytics and Strategic Workforce Planning, Merck Group HR

The use of people analytics has transformed our HR Business Partners from just providing reports to using data-driven insights to advice our managers. ###

Rachel Foo, Country HR Head, Merck Singapore

The business need



Merck is a world leader in Science and Technology and has 57,000 employees worldwide. It is one of the providers for breakthrough technologies in Healthcare, Life Sciences and Performance Materials sectors. Leveraging data analytics to better inform decision-making and making sure that people analytics is part of the DNA of the company are critical drivers to deliver its strategic business and people objectives.

The solution



- Positioned People Analytics and Strategic Workforce Planning Capabilities at the core of the Global HR strategy 2022.
- Implemented One Global People Analytics App, which is open to HR and business leaders to support strategic decision-making, leveraging more than 300 millions of pre-approved, relevant and accurate real-time data and insights.
- Piloted Innovative Predictive / Machine Learning Analytics (e.g. network analytics, flight risk modelling, etc.) to deliver impact during specific strategic business situations such as M&A, business model innovations.
- Partnered with selected global key HR and business ambassadors to accelerate internal Merck's people analytics capabilities internally.
- Empowered HRPBs to be data-driven strategic consultants to the business who could provide
 advise to business managers and raise them to a strategic level. For example, HRBPs correlate
 data to better engage and retain critical talent, predicting staff turnover based on performance
 discussions and team environment; as well as optimise organisational structure via best team
 set-ups.

The results



- >\$100 Million equivalent of time saved by HR and business leaders to access data in two minutes, instead of two weeks previously.
- 100% of business and people strategic discussions based on People Analytics dashboards and insights shared by HR.
- Millions of dollars of external consulting saved by being able to be own data-driven consultants.
- Singapore HR gained more credibility by using people analytics to communicate meaningful trends to drive high quality people related business decisions as well as prioritise actions to drive employee engagement.

Section 4.5:

Technology

will enable

these roles

to...

Overview of impact on the Talent Attraction function

Key trends impacting the Talent Attraction function

- Enhance efficiency of routine talent attraction processes through intelligent automation.
- Optimise candidate and onboarding experience through technology.
- Use data analytics for strategic sourcing and predictive insights for assessing effectiveness of talent attraction processes.

Implications on job roles

Spend less time on...

- Sourcing the talent pool manually.
- Developing hiring collaterals.
- Screening resumes.
- Shortlisting candidates.
- Coordinating interviews.
- Handling routine queries from candidates and new hires.

Spend more time on...

- Enhancing talent attraction through intelligent automation and analytics.
- Promoting the employer brand and Talent Value Proposition.
- Working with managers to shape job roles.
- Analysing effectiveness of talent attraction processes.
- Enhancing candidate experience.
- Designing and delivering impactful preboarding and onboarding.
- Resolving complex queries from candidates and new hires.

High	Medium	Low
 Associate 	HeadManagerExecutive	

Overview of Talent Attraction function

Traditionally, the Talent Attraction function has been tactical in sourcing talent pools based on manager requests, with minimal use of technology solutions. The function has largely performed transactional and administrative tasks such as screening and shortlisting candidates, coordinating interviews and handling queries from applicants to ensure timely filling of job vacancies.

In more progressive organisations, the Talent Attraction function has shifted to play a strategic role by developing a data-driven talent attraction strategy based on the business strategy and future skills needed. The function has started using intelligent automation to enhance the talent attraction processes and focus more on the development of a proactive approach for talent scouting through use of data analytics. The function is also responsible for development of a differentiated talent value proposition (TVP) based on the talent personas.

As a consumer-grade experience becomes critical, Talent Attraction professionals will spend more time on designing seamless candidate experience journeys aligned to the talent experience approach for diverse talent personas. This delivery of the candidate experience journey will be enabled through Al-based chatbots and mobile applications with proactive nudging.

The effectiveness of Talent Attraction function has direct implications on business success due to the high cost of hiring. In fact, acquisition of talent with the right skills for the business was the top ask of business leaders from HR. In our research, business leaders also highlighted recruitment as the top human capital process that will be impacted by technology in the next three years (see Figure 29).

Figure 29: Top three human capital processes to be impacted by technology in the next three years

Business
Leaders

	20000.0
Recruitment	1
Job Design and Organisation Structure	2
Employee Engagement	3

Recruitment is among the **top human capital process** impacted by technology in the next three years.

Technology impacting Talent Attraction function

The top five technologies that will impact the Talent Attraction function in the next three years are social media, data analytics, mobile applications, social robotics (personal assistants, chatbots etc.) and intelligent automation. The function can significantly reduce the time spent on manual tasks and perform more strategic or value-adding tasks by harnessing these technologies. Beyond enhancing the efficiency and effectiveness of processes, these technologies can also help to provide a better candidate / talent experience. Advanced data analytics through facial analysis and behaviour analysis, as well as gamification and virtual reality applications also enable the function to assess candidates more effectively and enable the recruitment of better talent.

Our survey also highlighted certain talent attraction processes with the highest potential for automation. This is based on the percentage of survey respondents who indicated the talent attraction processes with a high potential for automation. These are listed in the Figure 30.

Figure 30: Top five talent attraction processes with highest potential for automation

Talent attraction processes with highest potential for automation		
Screening of potential candidates	73%	
Sourcing of potential candidates	69%	
Management of communication with applicants	65%	
Analysis of talent attraction process through feedback and analytics	65%	
Onboarding for new hires	56%	

4. Overview of HR Functions

Our research identified the following technology trends impacting the Talent Attraction function:



Use of intelligent automation such as RPA, Al and ML technologies to automate and optimise routine and transactional processes will become increasingly prevalent. For example. Al will be used to scour external and internal databases for potential candidates and screen resumes. Programmatic job advertising can help to maximise chances that job advertisements will be seen by candidates matching the desired profiles. Beyond enhancing efficiency, Al has the potential to reduce human bias and enhance the objectivity of the selection process. For instance, Al algorithms in games and interview bots can help to identify candidates who have performance profiles similar to the company's top performers. Additionally, AI and machine learning embedded in video interview tools can also provide robust real-time data on candidate assessments.



In line with the increasing expectations to deliver consumer-grade experiences, Alpowered chatbots will be used as the main touch point in the recruitment process. This can enhance personalisation as well as seamlessness in candidate experience. Furthermore, these chatbots can also help with routine components of the recruitment process, ranging from scheduling interviews to administering assessments to answering queries, as well as guidance for navigating through the organisation during onboarding. Another powerful technology that can be used to engage potential candidates as well talent within the organisation is social media. Social media emerged as the topmost technology that will impact the function in the next three years. It will be used heavily to communicate the employer brand and TVP, as well as to proactively source and to network with potential talent. Gamification or virtual / augmented will reality assessments increasingly become common for assessing candidates. Mobile applications will enable delivery of personalised experiences, by providing

on-the-go access to various recruitment and onboarding processes such as virtual tours for new hirers, nudges for managers to engage with new hires during the onboarding period.



Lastly, the function is also increasingly expected to harness data analytics for proactive sourcing and data-led talent acquisition. For instance, use of enterprise-level workforce planning tools with analytics capabilities will enable predictive modelling of skills to enable skills-based hiring and facilitate budgeting for recruitment. Data analytics and AI can also be used in the segmentation of candidate personas to aid development of data-based talent attraction programmes. Companies will also increasingly use predictive analytics to predict attrition and new hire failures, which will enable proactive mitigation measures to be developed in advance. Data analytics will also help to assess the effectiveness of various processes such as linking characteristics of the preboarding / onboarding process with time-toproductivity, turnover rate etc. will yield insights on effectiveness of onboarding. Organisations also consider intangibles such as social & talent branding as one of the key KPIs for Talent Attraction professionals. By analysing this, Talent Attraction professionals can identify issues with employer brand and TVP in order to make enhancements.

The following section discusses the enhanced expectations in Talent Attraction roles.

Head, Talent Attraction

The Head, Talent Attraction will engage closely with the business to understand business needs and guide the development of HR strategy and financial budget for based on the future needs. The role will leverage insights from talent market and industry research to develop differentiated and data-driven talent attraction strategies for diverse groups of talents. The role will design a screening and assessment framework that incorporates the use of technology solutions to assess candidates. The role will be expected to drive

the development and communication of the employer brand and TVP.

As talent experience becomes an increasingly important focus for HR, the Head, Talent Attraction will be expected to design candidate experience journeys as well as preboarding and onboarding talent journeys that are seamless for diverse groups of talents.

There will be a medium level of impact of technology on the Head, Talent Attraction. The role is expected to enhance the outcomes through use of data analytics to develop differentiated and data-based talent attraction strategies. The role will also require technology related-skills to design candidate experience, onboarding experience and guide the function to embed technology across the function.

Manager, Talent Attraction

The Manager, Talent Attraction will implement proactive talent attraction and retention strategies. This will involve collaborating with the business to develop strategic workforce plans and budgets based on business needs and future capabilities required. Additionally, the role will work with business managers to articulate job roles and requirements in alignment with current and future business strategies. On the sourcing front, the role will be expected to perform competitive intelligence research and create candidate personas for targeted sourcing. The role will leverage technology to develop innovative techniques leveraging targeted sourcing of diverse groups of talents.

To enable the company to deliver on its TVP, the role will identify ways to embed the TVP into organisational practices across the talent lifecycle. The Manager, Talent Attraction is also expected to implement selection, preboarding and onboarding processes that deliver a seamless candidate experience. In addition, the role will evaluate the effectiveness of processes to facilitate future enhancements.

There will be a medium level of impact of technology on the Manager, Talent Attraction. The job scope will be enhanced to include targeted sourcing for various candidate personas and implementation of seamless candidate and onboarding experience. Additionally, the role will require new technology related

skills to implement data-based talent sourcing and attraction as well as deliver high level of experience through use of technology across the function.

Executive, Talent Attraction

The Executive, Talent Attraction will develop and implement proactive initiatives that build a positive employer brand and allow target talent pools to connect with the company. The role is expected to identify talent sources considering current and future business needs as well as diverse talent groups in the broader talent ecosystem. The role will explore new approaches and technologies for enhancing selection, hiring and onboarding, as well as support their implementation. The role will also execute a seamless and engaging candidate experience throughout the recruitment process.

There will be a medium level of impact of technology on the Executive, Talent Attraction. The role will have an enhanced job scope on implementing new approaches and technology for selection, assessment and hiring. The role will need to upskill in use of social media, data analytics and technology-related skills to deliver the enhanced role responsibilities.

Associate, Talent Attraction

The Associate, Talent Attraction will support the execution of proactive talent attraction initiatives. This will involve analysing employer brand visibility on outreach channels, analysing effectiveness of talent sources and suggest improvements based on the analysis of effectiveness of the sourcing channels. The role will build a pipeline of potential candidates for positions such as those with high risk of attrition. The role will also support aspects of the selection process such as background and reference checks and will research new technology and market practices to enhance the experience for candidates and new hires.

There will be a high level of impact of technology on the Associate, Talent Attraction. A significant part of the role's job scope will be replaced by technology while new or enhanced areas will emerge. For instance, resume screening will be facilitated by AI while the

role will be expected to research new technology and market practices to enhance onboarding experience. The role will need new technology-related skills such as use of data analytics to derive insights on new hires' onboarding experience through multi-sourced feedback.

Skills required by Talent Attraction professionals

Talent Attraction professionals will be expected to be proficient in **talent persona creation** and **data-led talent acquisition** to segment talent and use insights from research to inform talent sourcing and devise resourcing solutions. Proficiency in developing **social media and talent marketing strategy** will be important to ensure that the employer brand is

promoted optimally with sufficient reach across diverse groups of talent in the broader talent ecosystem. As organisations focus more efforts on talent retention. skills in talent value proposition design will provide a competitive edge in the "war for talent". Talent Attraction professionals will also require strong skills in candidate experience design and talent onboarding experience design to provide candidates and new hires with positive first impressions of the organisation. The Talent Attraction professionals will also need omni-channel communication skill in order to continuously engage with candidates and new hires. The overall talent experience will be supported by the integration of technology solutions aligned with business needs through the skill of technology-driven talent assessment strategy. These skills have been described in detail in Figure 31.

Figure 31: Role-specific future skills for Talent Attraction professionals

Focus areas	Description	
Talent Persona Creation	Develop strategy for talent segmentation aligned to organisation's needs and guide the impact across talent solutions.	
Data-led Talent Acquisition	Strategise data-driven approach to talent sourcing by advocating the use of business and talent metrics to predict candidate success and effectiveness of sourcing channels. Drive global talent market and industry research and competitive intelligence research across a range of industries.	
Social Media and Talent Marketing Strategy	Strategise new media marketing approach as well as platforms and champion employer brand to resonate with diverse groups of talent. Define the expected outcomes and ensure use of optimal platforms to achieve the desired outcomes.	
Candidate Experience Design	Strategise organisation's candidate experience and define essential components of the candidate experience to guide the enhancement of the overall candidate assessment process.	
Technology-driven Talent Assessment Strategy	Strategise talent assessment approach to ensure seamless integration with technology solutions aligned with business needs and overall talent experience strategy.	
Talent Onboarding Experience Design	Strategise organisation's preboarding and onboarding experience for new hires, and define essential components of the preboarding and onboarding experience to guide design of integrated programmes and the enhancement of the overall experience for new joiners.	
Talent Value Proposition Design	Strategise the organisation's Talent Value Proposition (TVP), including employer branding, culture and rewards philosophy, and guide the development of relevant talent policies to deliver compelling and differentiated TVP for diverse talent groups.	
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences.	

Case Studies

The case study below showcases the impact of the technology and on the Talent Attraction function in an organisation.

Accenture



We believe that human ambition is greater than obstacles, and potential is greater than pedigree... We believe in the power of humans and technology coming together to deliver a differentiated outcome for our organisation and an outstanding experience for our candidates. "

Grace Yip, Managing Director, Head of HR, Southeast Asia, Accenture

The business need



Accenture as a leading global professional services organisation, provides a broad range of services in strategy and consulting, interactive, technology and operations, with digital capabilities across all of these services. In order to do so, Accenture requires Modern HR practitioners with the capabilities and mindsets that elevate them beyond the transactional to focus on higher-value engagements, forging stronger HR-business partnerships. Accenture also needs to attract, assess, and retain the best talent as well as deliver a positive candidate experience to keep them engaged.

The solution

- · Embracing Modern HR, the team leveraged various technologies to attract, assess, and engage the best talent while elevating HR roles. Starting from the candidate experience, we designed solutions based on an understanding of the key factors that help candidates decide whether to join a company. Some notable initiatives include:
 - ▶ Immersive Experience: Leveraged virtual reality (VR) technology and gamification to make campus recruitment more interactive, engaging, and impactful in attracting the best talent. Through VR experience, candidates get the opportunity to experience work in Accenture that involve solving complex problems to improve the world.
 - ▶ Digital Assessment Centre: First line of application screening process for jobs is done through an AI chatbot, reducing administrative burden of large-scale candidate engagement and evaluation by recruiters.
 - ▶ Technical Assessment Platform for Technology Skills: Utilised technical assessment platforms to efficiently and objectively evaluate the technical proficiencies of specific tech candidates for a role-based assessment approach.
- · Using data and automation to enhance the workforce planning process:
 - ▶ Southeast Asia Bugbot: An AI chatbot that directly prompts business contacts for inputs on employees' roll-off dates through instant messages while avoiding inaccuracies of manual emails and spreadsheets.
 - ▶ Feature Automation Tool (RPA): Helps process reports and data, automating validation of new talent demands logged by business teams.
 - ▶ Talent Supply Chain (TSC) Dashboards: Simplify the process of obtaining data for daily decisions and allow powerful insights generation through a dashboard with data accessible and easily manageable by HR and business, freeing up HR capacity from needing to provide business with data manually.

The results



- Immerse Experience: Campus-side application rates increased by 60%. Go-to-market Campus initiatives and processes optimised by 75%. 90% of participants felt that it increased Accenture's attractiveness as an employer and were interested in applying.
- · Digital Assessment Centre: Automation of 70% of end-to-end recruiting processes for data science roles. Achieved candidate experience rating of 4.5/5 and recruiter interview time savings.
- · Technical Assessment Platforms for Technology Skills: Cost savings achieved by cutting down time on technical skills tests and interviews. Reduction of 6.4 days in time to offer. Achieved candidate experience rating of 4.02/5.
- Southeast Asia Bugbot: Helps save 32% of HR practitioners' time spent on validating project roll-off information.
- Feature Automation Tool (RPA): Time spent on validating project talent demands reduced from at least an hour long to five minutes.
- · TSC Dashboards: Helps save 75% of time spent preparing HR metrics for the business.
- · These transformation initiatives by Accenture Southeast Asia HR have helped the organisation achieve S\$ 650,624 of total cost savings or 2,542 of total manhours savings per year.

Section 4.6:

Technology

will enable

these roles

to...

Overview of impact on the Employee Experience and Relations function

Key trends impacting the Employee Experience and Relations function

- ► Enhance efficacy of data collection on employee engagement initiatives, and service delivery through intelligent automation.
- Enable consumer grade talent experiences and continuous listening through communication platforms.
- ▶ Leverage data analytics and sentiment analysis for greater talent insights.

Implications on job roles

Spend less time on...

- Implementing annual employee engagement surveys.
- Collating employee engagement data and feedback.
- Drafting standardised communication messages on employee relations policies.
- Categorising routine grievance matters and documenting routine employee issues.

Spend more time on...

- Defining talent personas.
- Designing talent journeys for multiple personas.
- Implementing continuous listening strategies.
- Evaluating tangible and intangible metrics for talent experience.
- Developing dashboards and datadriven insights on talent experience and guiding on the use of such selfservice platforms.
- Managing relations with the broader talent ecosystem.
- ✓ Fostering culture in alignment with organisational values.

High	Medium	Low
ExecutiveAssociate	HeadManager	

Overview of Employee Experience and Relations function

Employee engagement has usually taken the form of annual surveys and snapshot-in-time programmes. Practitioners usually focus on operational and transactional tasks such as survey administration, monitoring and tracking participation, collating and analysing feedback for employee engagement plans. Additionally, the function is also responsible for managing labour relations, engaging stakeholders such as trade unions and work councils.

However, employees of today expect more, in terms of a consumer-grade talent experience that permeates all aspects of the talent lifecycle. Employee Experience and Relations professionals of the future will be responsible for optimising this talent experience. There will be an increased focus on defining talent personas to design personalised talent journeys for specific talent profiles as well as managing engagements and relations with the broader talent ecosystem by leveraging communication technology. Employee Experience and Relations professionals will also need to foster a high-performing and inclusive culture in alignment with organisational values and the Talent Value Proposition (TVP). In our research, HR leaders have highlighted that the Employee Experience and Relations function will be one of the HR functions most impacted by technology in the next three years (see Figure 32).

Employee experience and relations is one of the top three HR functions to be impacted by technology in the next three years.

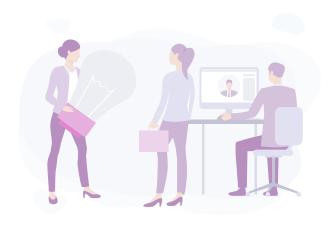


Figure 32: Top three functions most impacted by technology in the next three years

three years	Leaders
Operations and Technology	1
Learning and Organisation Development	2
Employee Experience and Relations	3

Technology impacting the Employee Experience and Relations function

The technologies that will most impact the Employee Experience and Relations function in the next three years are social media, mobile applications, social robotics, data analytics, AI and machine learning. These technologies will enable the function to continuously engage diverse talent groups and obtain real-time data and feedback on talent experience and needs. According to our survey, the employee experience and relations processes that will be most impacted by technology are those that determine how employees of the future are to be engaged in a targeted and systematic fashion (see Figure 33).

Figure 33: Top three employee experience and relations processes most likely to change in the future due to technology

Employee experience and relations processes	Rank order
Analysis of people engagement metrics to understand people engagement levels	1st
People engagement strategy planning	2nd
Development of solutions to engage identified workforce segments	3rd

Our research identified the following technology trends impacting the Employee Experience and Relations function:



Intelligent automation such as social robotics. and machine learning technologies will enable the automation of routine and transactional employee engagement processes such as survey development and deployment as well as auto-reminders. Alpowered chatbots will automatically facilitate first level support and resolution of routine talent queries. Categorisation of reported grievances will also be automated through Al and machine learning technologies. These technologies will also automate the realtime collation of employee engagement data and feedback as well as monitor talent sentiments to measure effectiveness of talent engagement programmes.



There is also increased expectation from the function to utilise technology to deliver consumer-grade talent experiences across all talent processes. The delivery of this experience is enabled through continuous communication and feedback with various stakeholders. Communication platforms such as mobile applications will enable the delivery of personalised communications and services to talent. Social media, as the technology with the greatest potential impact on the function, will enable engagement of both employees within the organisation as well as external parties for information sharing to better manage needs and expectations. These communication platforms, embedded with proactive nudging, will also enable the promotion of behaviours in line with organisation culture.



With more data being continuously collected from multiple sources, the Employee Experience and Relations function is expected to use data analytics to derive insights. Sentiment analysis will generate insights on the needs of diverse talent groups. This will enable the

function to segment and define talent personas and design personalised talent journeys. Data analytics may also provide insights on workforce segments with low engagement levels for interventions to be developed. With a stronger sense of the "pulse" of the organisation, it will enable better diagnosis and design of cultural interventions. More importantly, data analytics can examine linkages between talent experience programmes and business outcomes, to influence talent engagement-related decisions. Predictive analytics can also enable the function to obtain insights to preempt employee relations risks and allow time to develop mitigation strategies.

The following section discusses the enhanced expectations in Employee Experience and Relations roles.

Head, Employee Experience and Relations

The Head, Employee Experience and Relations will develop strategies to enhance talent experience and relations across the talent lifecycle. This involves partnering with business and HR leaders to design talent journeys for multiple personas in alignment to the TVP. The Head, Employee Experience and Relations will also drive the implementation of talent experience programmes and design frameworks to review their effectiveness. The Head, Employee Experience and Relations will develop labour strategies through data insights and pre-empt workforce management risks and challenges related to the broader talent ecosystem. The role will also be expected to shape organisational culture in alignment with organisational values and the TVP. This will be done through design of culture building initiatives and coaching of senior leaders.

There will be a medium level of impact of technology on the Head, Employee Experience and Relations. The role is expected to have heightened expectations to leverage sophisticated technology-based solutions that can take employee engagement to the next level. This will require the role to possess

technology-related skills such as talent journey mapping, talent persona creation and continuous listening strategy to drive the use of appropriate technologies for capturing real-time feedback and delivering talent experience.

Manager, Employee Experience and Relations

The Manager, Employee Experience and Relations will partner with the business to define talent personas and implement talent journeys to optimise talent experience for multiple personas. The role will leverage data analytics to assess the effectiveness of talent experience programmes on business outcomes, and to plan and implement improvement actions to enhance talent experience. The Manager, Employee Experience and Relations will also need to maintain continuous channels of communication with talent and labour unions to enhance relations and manage workforce risks and challenges. The role will implement culture-building initiatives that integrate diverse groups of talent, by organising activities to foster a high performing culture that embraces diversity and inclusion (D&I).

There will be a medium level of impact of technology on the Manager, Employee Experience and Relations. Parts of the job scope will be new or enhanced, for instance, defining the talent personas and developing data-driven insights on talent experience programmes. The role will also need to have the necessary knowledge to recommend appropriate technologies, as well as skills such as talent journey mapping and talent persona creation. This will enable the role to deliver the required experiences and to measure both tangible and intangible elements, such as pay and benefits, recognition and work-life balance, of the talent experience.

Executive, Employee Experience and Relations

The Executive, Employee Experience and Relations will implement talent experience initiatives

to improve talent experience and wellness for diverse groups of talents. The role will also be expected to identify new technologies that help to enhance and measure talent experience. The Executive, Employee Experience and Relations will be expected to analyse real-time feedback on talent experience and recommend areas for improvement. Implementation of talent relations programmes to manage workforce risks and challenges will be expected of the role. This will be done through continuous engagement with diverse groups of talent on talent relations programmes and policies.

There will be a high level of impact of technology on the Executive, Employee Experience and Relations. This role will see a considerable change in the job scope as several tasks are replaced or enhanced by intelligent automation. The collection and collation of feedback will be automated, allowing the role to spend more time to harness data-driven insights to better support managers in addressing non-routine feedback. Using AI and data analytics platforms, the role will undertake new areas of work such as assisting line managers in the use of self-service data and analytics.

Associate, Employee Experience and Relations

The Associate, Employee Experience and Relations will support the execution of talent experience and wellness programmes, as well as support talent relations for diverse groups of talent. This includes implementing feedback channels, research on innovative workplace wellness practices, as well as drafting bite-sized communications on programmes and policies. The role will also conduct research on relevant technologies to support the implementation of continuous engagement programmes and policies. The Associate, Employee Experience and Relations will analyse data to generate insights on issues faced by diverse groups of talent and to track the effectiveness of solutions implemented.

There will be a high level of impact of technology on the Associate, Employee Experience and Relations. A considerable number of tasks, such as collating engagement surveys responses, documentation of employee issues reported, and the addressing of routine

queries will be automated by technology. The role will spend more time on new or enhanced tasks such as analysing data on talent experience to generate insights for decision making. The role will also focus more on researching new technologies and best practices. The significant change in job scope will require the role to be equipped with new technology-related knowledge and skills.

Skills required by Employee Experience and Relations professionals

Employee Experience and Relations professionals will be expected to be proficient in **talent persona creation** to develop an in-depth understanding of the characteristics, needs, and preferences of various

segments in the company's diverse workforce. Related to that, skills in talent journey mapping and design thinking will enable HR to strategise and address talents' needs across the talent lifecycle to deliver a positive talent experience. As the pace of change increases in the workplace, proficiency in developing a continuous listening strategy enables HR to keep up on ground sentiments and reactions to organisational policies. In order to create talent experiences across various touch points and communication channels, proficiency in utilising omni-channel communication will also be important. Lastly, Employee Experience and Relations professionals will also require cross cultural and diversity sensitivity to model the right behaviours when interacting with a diverse workforce as well as to promote D&I in the workplace. These skills have been described in detail in Figure 34 below.

Figure 34: Role-specific future skills for Employee Experience and Relations professionals

Focus areas	Description
Talent Persona Creation	Develop strategy for talent segmentation aligned to organisation's needs and guide the impact across talent solutions.
Talent Journey Mapping	Guide the development of talent journey across the talent lifecycle for diverse groups of talent. Drive use of innovative technologies to deliver the talent experience.
Design Thinking	Build and integrate culture that encourages human-centred strategies for development of programmes which lead to enhanced talent experience.
Continuous Listening Strategy	Design continuous listening strategies and determine technology to capture real-time feedback and evaluate effectiveness of talent experience programmes to develop enhancement.
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences.
Cross Cultural and Diversity Sensitivity	Develop strategies to promote awareness of cultural and diversity differences to foster a work environment that cultivates a high performing and enabling culture for all talent.

Case Studies

The case study below showcases the impact of the technology and on the Employee Experience and Relations function in an organisation.

Far East Organization



Our people are at the heart of the delivery of organisational excellence. As a Christian enterprise, the difference that we make to the marketplace must be our work that is marked by this excellence. Our commitment as The Best Employer is for all our people to find resonance in our values, experience the wealth of diverse opportunities offered by our enterprise, and build their future with us. **J*

Jodie Choo, Executive Director and Group Head of HR & IT, Far East Organization

The business need



Far East Organization operates as a Christian enterprise which seeks to be a community of love and a workplace of grace doing business guided by the eternal truths of Jesus Christ. Its operating ethos is to do good business and to do good in business. The values of stewardship and grace guide Far East Organization to deliver excellence in all aspects of business, work and lives. A key priority of Group Human Resources is to foster a culture and an environment that offer holistic support in every aspect of the employees' experience as they journey together to fulfil the mission to inspire better lives. Far East Organization seeks to help employees discover their calling, grow virtuous character, develop their capability, empower and commission them to fulfil the work of their calling.

The solution



- Far East Organization developed a listening strategy that uses a robust and structured
 continuous listening approach through multiple surveys and enables the delivery of a more
 tailored and personalised experience for employees.
 - Annual Colleague Engagement Survey: Implemented annual engagement surveys since 2011 to better understand intangibles such as motivations and concerns, and what engages employees. This allowed for the evolution to a more agile, meaningful, and scalable colleague experience approach to help steer organisation-wide improvements and enabled leaders at every level to drive change and monitor progress. Data analysis was also leveraged to analyse each year's data and identify areas for improvement, develop action plans, and drive greater engagement, performance and productivity.
 - ▶ Other Feedback Platforms: Implemented various feedback platforms through concise pulse surveys shortly after key engagements, such as onboarding, exit interviews, and 360 reviews which harness the collective insights and knowledge of the workforce. This enabled HR to deliver personalised interactions at scale to empower a high performing, positive, and fulfilling workplace for all.
 - ▶ Employee Workpulse Surveys: In June 2020, Far East Organization participated in a nationwide People Continuity Package launched by EngageRocket, supported by the Institute for HR Professionals (IHRP) and Singapore Human Resource Institute (SHRI). The employee workpulse survey seeks to measure and improve WFH effectiveness and team well-being in the COVID-19 era. This was followed by action planning by the respective people managers to address key concerns raised by employees.
- The surveys and feedback platforms implemented by Far East Organization are 100% mobile
 accessible to facilitate participation of frontliners in essential services who may not have ready
 access to computers or laptops in their course of work. The surveys are also available in Mandarin
 and Malay, to cater to employees who are not conversant in English.

The results



- Awarded Kincentric Best Employer
 - Singapore in 2019.
- Achieved an engagement score of 91% through a 99.9% employee participation rate in the organisation-wide Colleague Engagement Survey in 2019, an all-time high, in comparison to an engagement score of 61%, and employee participation rate of 69.4% in 2011.
- As the engagement score increased, there was a corresponding decrease in attrition rate, from 30% in 2014 to 25% in 2019.

Section 4.7:

Technology

will enable

these roles

to...

Overview of impact on the Talent Management function

Key trends impacting the Talent Management function

- Facilitate skills-based talent management approach through intelligent automation.
- Enable personalised talent journeys through use of mobile applications.
- Produce data-driven talent insights through predictive analytics for decision making.

Implications on job roles

Spend less time on...

- Collecting talent metrics.
- Maintaining a talent metrics database.
- Responding to first-line queries on talent management programmes.
- ✓ Collecting feedback on talent management programmes.
- Implementing one-size-fits all talent management and career management programmes, and succession plans.

Spend more time on...

- Segmenting talent metrics and developing talent profiles.
- Developing talent management strategy for diverse talent groups.
- Enabling a skills-based approach to personalise career progression pathways.
- Targeted assessment approach for effective talent deployment.
- Implementing data-driven succession planning.
- Measuring effectiveness and ROI of talent management programmes through data-driven frameworks.

High	Medium	Low
 Associate 	ManagerExecutive	■ Head

Overview of Talent Management function

In the past, the Talent Management function has developed and implemented a traditional one-size-fits all approach for talent and career management programmes, and succession plans. The function responded to queries on the programmes and collected feedback on the programmes as well as maintained a database of talent metrics. However, as technology and workforce demographic trends evolve, new skills will be needed in future. This will require a shift in the focus of the function to deliver a skills-based approach for talent management.

As organisations increasingly rely on more diverse groups of talent across the broader talent ecosystem, including gig and contract workers, the function is expected to develop a total talent management strategy that is flexible and personalised to address the needs of various talent personas. Talent Management professionals will develop a skills-based approach for career progression that focuses on skill development and provides personalised career opportunities based on skills transferability. Talent Management professionals will focus on enabling personalised and self-directed skill development and career progressions, which will allow employees to play a proactive role in shaping their careers. Guidance will also be provided to employees for analysing progression and learning opportunities based on skills and managing own career pathways. Talent Management professionals will also coach managers to drive self-directed career development within their teams.

The function will use a data-driven talent assessment approach to assess individual skills and gaps in order to develop personalised development and succession plans for critical roles. The data-driven insights will also be used to guide business leaders on talent decisions.

Technology impacting the Talent Management function

Our survey highlighted the top five technologies that will most impact the Talent Management function in the next three years are data analytics, Al and

machine learning, social robotics, mobile applications and social media. These technologies will enable the function to create a skills repository for the organisation, identify high performers using data, as well as develop mobile-enabled, self-directed and personalised talent management programmes. The analysis of data on skills and performance, experiences combined with analysis of intangible metrics such as strength of organisation networks can also provide insights to uncover hidden talent and enable future-centric leadership development and succession planning. This will enable the function to empower managers and employees to adopt a skills-based and talent-centric approach to talent management.

Our survey also identified the top talent management processes that will be most impacted due to technology (see Figure 35).

Talent management processes most likely to change in the future due to technology.

Figure 35: Top five talent management processes most likely to change in the future due to technology

Talent management processes	Rank order
Assessment of current workforce capabilities	1st
Assessment of success profiles of current leaders	2nd
Assessment of learning and development gaps for candidates	3rd
Identification of necessary capabilities for the future	4th
Identification of potential succession candidates for key / leadership roles	4th

Our research identified the following technology trends that will impact the Talent Management function:



The use of intelligent automation such as Al and machine learning technologies, along with data analytics will enable the scan of talent profiles and development of a skills repository for the organisation. This will help the function to approach all talent management initiatives from a skills development perspective; for e.g. analysis of real-time talent capabilities from the skills repository will identify suitable talent profiles for specific projects and accelerate talent deployment across the organisation. Cloud technology will also enable the real-time access of the skills repository across multiple geographical locations. As organisations shift towards a truly agile structure and critical skills become scarce, this approach will become key to managing talent within organisations. Further, Al and analytics driven solutions will recommend appropriate career progression pathways based on talent profiles, talent aspirations and the organisation's current vs. future needs by comparing options and skill gaps.



The growing demand for a seamless, consumer-grade experience has led to the need for the function to deliver personalised talent management programmes through use of mobile applications. Mobile applications enable on-demand access to career progression pathways based on individual talent profiles and aspirations. Mobile applications can also provide gamified simulations through use of virtual / augmented reality applications for skills assessment to identify gaps and encourage upskilling. They also allow collection of frequent and real-time feedback on talent management programmes. This feedback can be additionally analysed using sentiment analysis to further enhance the programmes.



There is an increased focus on use of data insights for talent decisions. The use of

technology platforms has enhanced the efficiency of data collection to enable data analytics. From our research, data analytics ranks as the top technology that will impact the function in the next three years. The Talent Management function will analyse data from talent profiles against future skills needed, which will provide data-driven insights to proactively develop future relevant skills for the organisation. Predictive modelling of key talent metrics will provide insights on potential talent issues such as flight risk, career derailment and job mismatches. Talent Management professionals can use this data to proactively coach managers to provide personalised approaches for retention of critical talent, and to unlock the full potential of their direct reports through skills and capabilities' optimisation. Predictive analytics will also be able to predict future talent for leadership through facilitating the identification of hidden gems by analysing the fundamental qualities of a leader against talent profiles.

Data analytics and predictive modelling can also analyse the impact of talent management programmes on business performance indicators. This can be done by monitoring talent metrics, such as retention of high performers, and analysing their correlation to the business performance indicators. This will enable measurement of effectiveness of various talent management programmes and enhance these programmes to have a greater linkage to business performance.

The following section discusses the enhanced expectations in Talent Management roles.

Head, Talent Management

The Head, Talent Management will drive a skillsbased and data-driven approach to talent management across the organisation. The role will define the overall talent management strategy for diverse talent groups, based on the analysis of talent capabilities, aspirations, and business needs. Head, Talent Management will drive the use of technology to deliver personalised and self-directed talent management and career development programmes. The role is also expected to collaborate with the business to define data-driven succession planning principles to develop succession plans for critical senior roles. Overall, data-driven frameworks will be established to measure effectiveness and ROI of talent management programmes as well as predict key instances that will impact succession plans for critical talent.

There will be a low level of impact of technology on the Head, Talent Management. There is minimal impact of automation on the job, and low / minimal requirement of technology-related skills. Nonetheless, the job scope is still expected to change with an increased focus on data analytics to understand talent preferences for the development of a holistic total talent management strategy. This will mean providing personalised talent management programmes for diverse talent groups across the broader talent ecosystem, including gig and contract workers.

Manager, Talent Management

Manager, Talent Management implement talent management strategy for diverse talent groups, aligned with the business needs. The Manager, Talent Management will design targeted skills-based career journeys for diverse groups of talent and enable effective talent deployment. The role will also implement integrated platforms that provide proactive nudging and enable self-directed career journeys and succession planning. There will be an expectation to guide business managers on delivery of personalised and self-directed talent journeys. The role will leverage insights from data analytics to identify critical capabilities for talent development and enhance the talent management programmes to deliver business outcomes.

There will be a medium level of impact of technology on the Manager, Talent Management. The role is expected to continuously develop knowledge of new technologies to enhance talent management processes, and to implement personalised talent management processes. With the increasing need to

develop an integrated talent management strategy for diverse groups of talent, the role will need to leverage data analytics and gain a stronger understanding of talent preference and business needs.

Executive, Talent Management

The Executive, Talent Management will support the implementation of talent management programmes and conduct data analysis based on business needs. The role will support career coaching initiatives and help managers and employees on the use of personalised talent management processes to meet business and talent needs. The Executive, Talent Management will support the implementation of integrated platforms to enable self-directed talent journeys. The role will develop talent profiles and analyse key roles and apply relevant parameters to provide a list of potential successors.

There will be a medium level of impact of technology on the Executive, Talent Management. The increased expectation of talent managing their own career journeys will change the role's job scope to focus on implementation of personalised and self-directed talent management processes through use of technology. The role will also need to upskill to use data analytics to assess effectiveness of talent management programmes. Intelligent automation will support the role by collecting real-time feedback on these talent management programmes automatically.

Associate, Talent Management

The Associate, Talent Management will use data analytics throughout his / her work. The role will segment talent data and provide initial insights on skills gaps for diverse talent groups. The role will develop interactive resources to deliver information on talent management programmes and support implementation of personalised career development pathways using technology. The role is also expected to extract succession profiles and provide analysis of

skills assessment of potential candidates against these profiles to support decision-making.

There will be a high level of impact of technology on the Associate, Talent Management. A substantial portion of the job scope will be replaced by intelligent automation. For instance, query handling on talent management programmes will be facilitated by AI chatbots while AI and machine learning will automate the process of documenting talent profiles. The role will be expected to evolve, and incumbents need to upskill themselves to undertake new areas of work such as segmentation of talent data to provide initial insights. New technology-related skills such as use of data analytics for capability assessment and talent profiling will also be required.

Skills required Skills required by Talent Management professionals

The Talent Management professionals will be expected to be proficient in **personalised talent management** to understand diverse talent personas and develop a holistic talent management strategy for diverse talent groups. They will also need skills in **strategic talent deployment** to deploy talent based on business needs, skills match, and talent aspirations. Skill in **capability assessment framework** will be crucial to identify skills gaps at individual and organisation level to recommend talent developmental interventions. **Career journey design** and **succession planning** skills will enable Talent Management professionals to design career journey architectures and succession planning frameworks. These skills have been described in detail in Figure 36 below.

Figure 36: Role-specific future skills for Talent Management professionals

Focus areas	Description
Personalised Talent Management	Design personalised talent management strategies and frameworks as a key component of Talent Value Proposition (TVP) by considering the diverse talent personas and business needs.
Strategic Talent Deployment	Develop skill-based talent deployment strategy and framework and guide the implementation through seamless technology integration to enhance the integrated skills repository and talent matching that will enable stronger synergy between talent and the role performed.
Capability Assessment Framework	Guide the development of capability assessment framework by leveraging data on industry demands, talent profiles and business needs to highlight future gaps.
Career Journey Design	Guide the design of the career journey architecture to build future organisational capabilities and enable talent to achieve desired career aspirations based on their personas.
Succession Planning	Drive development of succession plans for key talent, high-potentials and leadership roles, by leveraging relevant data analytics on individuals and organisation to enhance succession plans.

Case Studies

The case study below showcases the impact of the technology and on the Talent Management function in an organisation.

Schneider Electric



We found that 47% of people who leave was because they couldn't find an opportunity they wanted. With 140,000 global employees, the company needed a high-powered internal mobility programme. "J"

Andrew Saidy, VP of Talent Digitization, Employer Branding & University Relations, Schneider Electric

The business need



Schneider Electric is a global specialist in energy management and automation. The HR function ensures organisation's capability and workforce needs are met by keeping employees engaged and providing them meaningful opportunities. However, many employees still find it hard to discover new projects and jobs available within the company. An internal mobility programme enabled by technology was put in place to enable employee engagement and talent development.

The solution



- Open Talent Market (OTM) was deployed by HR as an exciting and transformative experiment to create an internal talent marketplace for everyone.
- An OTM campaign was launched with strong leadership support and involvement, and included a
 multi-channel engagement approach to drive early adoption and registration on the platform.
- OTM is a one-stop-shop for career development as it creates an internal talent market by leveraging Artificial Intelligence (AI) to match the supply and demand of talent throughout Schneider Electric:
 - Open Talent Market is powered by Gloat, an advanced talent marketplace which is also connected to Schneider's Learning & Development platform "My Learning Link" and Rewards platform "Step Up".
 - ▶ The relevant jobs and projects were uploaded on the platform and mentorship programmes for employees were also set-up via the platform.
 - ▶ It served as the employee's primary system to discover projects, assess skills and identify mentors.
 - ▶ The platform allows managers quick access to in-house skills while optimising the use of currently available internal resources managers play an active role in finding talent and pitch opportunities / projects to attract talent from anywhere across Schneider.
 - ▶ This augmented global internal mobility by providing training pathways for new roles and enhanced access to internal job vacancies.
 - ▶ HR provided rewards to encourage employees to utilise the platform and take on new projects and loan skills with more than 75% of employees already registered on the system.

The results



- With OTM, Schneider is showing the way in the Future of Work with recognition from Global HR analysts and thought leaders such as Josh Bersin.
- Singapore was one of the first countries to pilot and implement OTM:
 - Over 60% of Singapore population enrolled.
 - Over 70 project assignments and opportunities successfully filled.
 - Over 100 mentor / mentee matches.
- Globally 49,000 hours unlocked from projects translating to over €780,000 (~S\$1.24 million) in savings.

Section 4.8:

Technology

will enable

these roles

to...

Overview of impact on the Learning and Organisation Development function

Key trends impacting the Learning and Organisation Development function

- ▶ Enhance future reskilling / upskilling and identify relevant and impactful learning content through use of intelligent automation.
- ▶ Deliver innovative learning experiences and promote desired culture throughout the organisation through mobile applications and communication platforms.
- Leverage data analytics to optimise learning and culture alignment for business transformation.

Implications on job roles

Spend less time on...

- Collating data gathered on skill assessments.
- ✓ Maintaining database for learning content.
- Coordinating delivery of learning programmes.
- Liaising with trainers for scheduling and conducting of learning programmes.
- Collecting feedback on learning and development programmes.
- Monitoring and tracking the delivery of learning programmes.

Spend more time on...

- Developing and implementing skills assessment frameworks to identify critical skills for future.
- Developing an integrated digital learning roadmap.
- Delivering on-demand and bite-sized learning experiences.
- ✓ Curating learning content.
- Measuring effectiveness of L&OD programmes.
- Shaping desired culture and values across talent lifecycle through technology solutions.
- Incorporating elements of agile organisation structure.
- Championing sustainability, diversity and inclusion and purpose for promoting right behaviours.

High	Medium	Low
 Associate (L&OD) 	Head (L&OD)Manager (L)Executive (L&OD)	Manager (OD)

Overview of Learning and Organisation Development function

The Learning and Organisation Development function has tended to focus on a one-size-fits all learning and development strategy as well as pointorganisation development and change management initiatives. The learning and development strategy was traditional in nature, based largely on classroom-based learning. The function played an administrative role of coordination, monitoring and tracking, feedback collection for various learning and organisation development programmes. Much time was spent on maintenance of the learning content database, and sourcing of vendors and trainers. The work in organisation development was also restricted to the development and implementation of change management initiatives for specific organisational changes.

Technology has enabled the function to develop and implement an integrated digital learning strategy that delivers personalised and future-focused learning across diverse talent groups and helps measure its effectiveness and impact on business performance. The availability of extensive learning content and providers has reduced the emphasis on in-house development of learning content and increased emphasis on curation of best-in-class content. With technology solutions, the function will shift towards digital learning to deliver personalised learning experiences through availability of on-demand and bite-sized learning, allowing selfpaced development. The function will focus less on administrative tasks such as management of the learning content database. In our survey, all participants indicated that there is moderate to strong automation potential for managing the repository of learning and development programmes.

As organisations adopt agile ways of working, use broader talent ecosystems-including gig and contract workers, and businesses continue to transform, there will be an increased need for organisation development. The Learning and Organisation Development function will be expected to develop initiatives that drive culture alignment and organisation transformation. In future, the function will set the direction for organisation design that enables agile work structures, that are flexible and scalable to meet future needs. The function will

be expected to diagnose opportunities for change management and culture initiatives as well as implement relevant activities to address identified gaps. The function will also be expected to champion elements of sustainability, diversity and inclusion and purpose within the organisation. Lastly, the function will make greater use of data analytics to measure effectiveness of various learning and development programmes as well as organisation transformation and change management initiatives; and align them to achieve business outcomes such as knowledge retention and culture change.

Technology impacting Learning and Organisation Development function

The technologies that will most impact the Learning and Organisation Development function in the next three years are data analytics, mobile applications, AI, cloud technology, and social media. These technologies will elevate the capabilities of the function to deliver greater value-add to the business such as developing a digital learning strategy, design and implement initiatives that drive organisation transformation and culture alignment. Our survey also highlighted the learning and organisation development processes that will be impacted most by technology within the next three years (see Figure 37).

Figure 37: Top five learning and organisation development processes most likely to change in the future due to technology

Top five L&OD processes impacted by technology	Rank order
Assessment of gaps in learning and development programmes	1st
Management of repository of learning and development programmes	2nd
Analysis of return of investments on learning and development programmes	3rd
Analysis of relevant external learning and development programmes	4th
Identification of new learning and development programmes for investment	5th

Our research identified the following technology trends impacting the Learning and Organisation Development function:



Intelligent automation such as AI-enabled technologies will help HR to develop a comprehensive learning roadmap. AI and machine learning solutions will support content curation to enable continuous update of existing learning content in real-time as well as to ensure management of learning repositories. Embedding AI within Learning Management Systems (LMS) will also provide assessment of gaps, allow real-time collection of feedback on learning experiences and enable continuous improvements to learning content.



A key imperative for learning delivery in future will be the need for consumer-grade applications to create personalised, engaging and innovative learning experiences. Mobile applications allow the delivery of learning and organisation development programmes that can be accessed by talent at their own convenience. Our research identified that mobile applications ranked second in the impact of technology on the function, in the next three years. Learning content needs to be structured into bite-sized modules that can be easily consumed and mobile applications can nudge talent on towards learning content based on their skill gaps and aspirations, in order to manage their own learning journeys. Moving forward, a key imperative for the function will be to drive organisation transformation, culture alignment and change initiatives. Mobile applications, social media and innovative communication platforms can be used to effectively promote such initiatives. These technology solutions also provide the ability to monitor and track participation as well as collect real-time data on response to initiatives and talent morale.



There will be an increased focus on using **advanced data analytics**, including codification of intangible metrics, such as talent

sentiments and inspiration to learn, to enhance decision-making processes for optimising learning and organisation development programmes in the organisation. From our research, data analytics ranked as the top technology that will impact the function in future. Analysis of real-time market data and organisational workforce trends can be used to predict workforce skill gaps and demands. It can also be applied to identify learning gaps within the organisation to guide more targeted learning content distribution. The function will be able to analyse the effectiveness and return on investments (ROI) of learning and development programmes as well as the impact on business outcomes. Real-time feedback on change initiatives can be analysed to support the reinforcement of desired culture and drive business transformation. Data analytics along with AI will also be applied to conduct sentiment analysis and evaluate people risks as well as potential for culture misalignment. An example of sentiment analysis is to analyse tone of messages by analysing key words to understand employees' reactions to new initiatives or change implemented within organisations, on internal and external social media and communication platforms.

The following section discusses the enhanced expectations in Learning and Organisation Development roles.

Head, Learning and Organisation Development

The Head, Learning and Organisation Development will drive the development of an integrated digital learning strategy and foster a self-directed learning mindset within the organisation. The role will recommend new technologies to drive innovative learning experiences. Outlining learning strategies that provide a conducive environment which motivates learning and allow application back into the business will be expected of the role. Additionally, the role will need to develop a strategy for driving organisation transformation to achieve business outcomes.

establishing data-driven frameworks By to measure effectiveness and ROI of learning and development programmes as well as knowledge retention, the role will be able to provide insights to develop business case for learning investments. The role will also be expected to provide relevant advisory to business leaders in driving culture alignment and values within the organisation. The role will also develop communication strategies, leveraging various communication platforms to lead the promotion of sustainability, diversity and inclusion, purpose throughout the organisation, and digital citizenship. As use of technology becomes all pervasive, it will be key to help leaders and talent within organisations on the norms of appropriate, responsible and healthy behaviour regarding technology use in order to maximise productivity and protect its public image.

There will be a medium level of impact of technology on the Head, Learning and Organisation Development. With technology, there will be a new expectation from the role to lead the development of an integrated digital learning strategy. The job scope will also be enhanced with new tasks focused on building a strong understanding of the future business strategy in light of technology developments; and set the future direction and drive adoption of an agile organisation structure. New technology-related skills such as learning and development strategy, delivery and experience as well as sustainability and digital citizenship governance will be required of the role.

Manager, Learning

The Manager, Learning will support the development of a digital learning strategy for reskilling / upskilling of talent based on future business requirements. The role will also focus on delivering personalised learning journeys that provides ondemand access to best-in-class and bite-sized content to enable high quality user experience. Innovation in learning delivery, such as on-demand and bite-sized learning modules, will also be required to ensure talent is engaged during their learning programmes and there is a high take-up and completion rate. The role will collaborate closely with content designers and other technology platform vendors to continuously enhance the user experience. By leveraging data analytics, the

Manager, Learning will provide inputs on effectiveness of learning investments and programmes as well as their impact on business performance to support decision-making.

There will be a medium level of impact of technology on the Manager, Learning. The role will be enhanced with greater expectations to introduce technology across the entire learning and development value chain. To be effective, the role will need to be familiar with technologies such as AI / machine learning to enable performance of new tasks in the area of content curation. The role will also need to familiar with mobile applications to embed them into learning delivery to provide avenues for the delivery of an effective digital learning experience. Knowledge of new technologies and technology-related skills will be required for the role to perform effectively.

Manager, Organisation Development

The Manager, Organisation Development will be an agent of change to develop and implement programmes for organisation transformation. The role will be expected to work closely with the business and project future workforce demands based on organisational design through identifying inefficiencies in workflows, structures and systems, and realigning them to fit business goals. The Manager, Organisation Development will leverage data to measure talent sentiments and assess effectiveness of relevant change programmes. The role will plan initiatives for organisation transformation to build desired culture across various touchpoints for diverse talent groups. The role will also plan for organisation design considering elements of agile work structure. Additionally, the role will articulate elements of sustainability, digital citizenship, diversity and inclusion, and purpose in the organisation as part of the overall organisational culture.

There will be a low level of impact of technology on the Manager, Organisation Development. There is minimal impact of automation on the job, with minimal expectation for the role to have new technology-related skills. While the scope of the job scope will largely be unchanged, the enhanced expectation will be to

leverage data analytics to obtain insights on organisation design as well as determine impact and effectiveness of organisation transformation initiatives.

Associate, Learning and Organisation Development

The Associate, Learning and Organisation Development will support the assessment of skills and capability gaps in the organisation by providing an initial analysis of future skills requirements. The role will also utilise technology to collate talent data through skills repositories. The Associate, Learning and Organisation Development will support user tests on execution of learning and change initiatives and technology platforms. Additionally, the role will assess effectiveness of learning and organisation development programmes to support prioritisation of investments. The role is also be expected to support self-directed learning by providing user guides and information for use of the self-directed learning tools.

There will be a high level of impact of technology on the Associate, Learning and Organisation Development. The role will see several tasks being replaced by intelligent automation. For example, Al will collate data on skills and gaps as well as maintain learning content database. The sourcing of vendors for conducting of learning and development programmes will also be automated due to technology platforms. The role will be expected to undertake new areas of work, such as conducting initial analysis of skills and capabilities gaps, support delivery of digital programmes, and perform user testing to enhance talent experiences. This will mean the role will need to upskill and gain new technology-related skills such as people analytics and user experience / user interface design.

Skills required by Learning and Organisation Development professionals

It is critical for the Learning and Organisation Development professionals to be able to develop learning and development strategy and drive the integration of technology to deliver impactful learning experience and encourage self-directed learning behaviours. Driving transformation and culture change initiatives based on organisational changes, future of work as and social drivers will be delivered through proficiency in skills such as organisation transformation, workplace culture and change management advisory and omni-channel communication. They will also be expected to use content marketing strategy skills to promote and enhance sign-up rates of learning and development programmes. In order to enhance learning and development experiences for talent, skills such as design thinking and user experience / user interface design will be critical for the Learning and Organisation Development professionals. These skills will be useful for design of learning platforms and development of programmes for talent, considering needs and requirements of the users. Learning and Organisation Development professionals are also expected to educate talent on prevalent social issues as well as encouraging sustainable workplace practices and safeguard the business interests against risks through sustainability and digital citizenship governance skills. These skills have been described in detail in Figure 38.

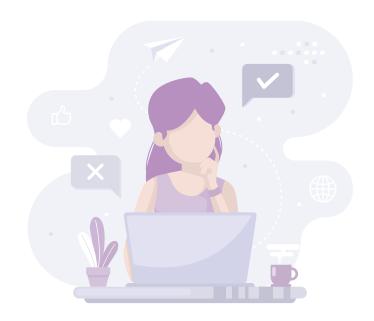


Figure 38: Role-specific future skills for Learning and Organisation Development professionals

Focus areas	Description	
Self-Directed Learning	Articulate the vision for self-directed learning in the organisation and coach leaders to encourage and rewards self-directed learning behaviours.	
Learning and Development Strategy, Delivery and Experience	Develop learning and development strategy and roadmap for the organisation in alignment with the future talent needs and organisation strategy as well industry trends. Drive technology integration to enhance overall learning experience and enable rapid upskilling and reskilling for diverse talent groups to meet current and future needs of the business and talent.	
Organisation Transformation	Drive organisation transformation strategies and programmes that impact organisation-wide structures, processes, behaviours, in alignment with business strategy, workforce trends and disruptive technologies, and enhance organisational effectiveness and performance.	
Workplace Culture and Change Management Advisory	Drive strategies to achieve desired organisational culture throughout the entire organisation through design and delivery of programmes, by leveraging understanding of social drivers in the organisation. Provide coaching to senior leaders and empower them to promote change across the organisation.	
Design Thinking	Build and integrate culture that encourages human-centred strategies for development of programmes which lead to enhanced talent experience.	
Content Marketing Strategy	Design differentiated marketing strategies for diverse talent groups to promote learning and development programmes and influence sign-up rates.	
User Experience / User Interface Design	Formulate guiding principles and concepts for intended user experience and interfaces, and direct development of prototypes and customised graphical user interfaces to anticipate user requirements and adopt industry best practices.	
Sustainability and Digital Citizenship Governance	Design inclusive and ethical workplace strategies to drive the organisation to have a positive impact on the environment, community, society, or economy. Develop policies and guidelines for corporate and digital citizenship to safeguard business.	
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences.	

Case Studies

The case study below showcases the impact of the technology on the Learning and Organisation Development function in an organisation.

SATS



In order to embrace change, we need people to think differently about their roles as leaders in the organisation. We talk about being courageous but combining that with open-mindedness. ""

Li Lian Tan, Chief Human Capital Officer, SATS

The business need



SATS is Asia's leading provider of food solutions and gateway services. SATS acknowledged that in a time of fast-paced change and due to the advent of technology, employees must be kept engaged and appraised of critical changes that have implications on the way they carry out their work and ultimately, their own career development. With that, SATS introduced various learning and change management strategies and initiatives to upskill and reskill their employees.

The solution

- Embarked on the transformation journey and adopted a new approach for culture and change management through the development of a robust and integrated culture and change management approach. The new approach demonstrated the inter-linkages between shaping culture and driving business excellence. HR shaped the culture and change management through various learning initiatives, campaigns, roadshows, etc.
- · Organised quarterly walk-abouts for SATS leadership to engage with employees and created an appreciation platform to recognise individuals and teams that demonstrated excellent job knowledge, possessed high levels of competency, and embodied the SATS Core Values at work. With award categories that replicate SATS Core Values, the initiative encourages and motivates employees to display these traits in their delivery of high-quality services and products.
- Established SATS Academy to continuously develop, upskill and reskill employees. ~160 inhouse training programmes are offered that are closely mapped to the Singapore government's SkillsFuture framework as well as the International Air Transport Association (IATA). Such trainings have helped to address capability gaps and promote organisation culture.
 - ▶ The learning programmes and modules were designed to be a mixture of structured facilitated learning, structured non-facilitated learning and informal learning to engage diverse employee profiles with different learning needs and styles as well as enabled self-directed learning. This included the use of simulators, technical ramp control centre, dolly, smart wheelchair system, and AR smart glasses to enhance learning.
 - ▶ Designed and introduced a 2-day programme, Accelerating Change in a Digital Workplace (ACDW) to support and motivate employees to adopt new technologies and digitalise processes for enhancement of productivity.
 - ▶ With the onset of COVID-19, SATS Academy also made rapid transitions to introduce virtual and e-learning with a 30 days LinkedIn Learning access extended to employees. Content were curated to provide appropriate training courses and videos for employees.

The results



- · Annual attrition rate of 11% compared to the national average of 21.6%.
- · Employee productivity increased 3.2% from 1.54 times to 1.59 times year-on-year.
- · Employees recorded an average of 68 hours of training a year.
- · Statistics from the 30 days LinkedIn Learning access:
 - Each user spent an average of 24 hours 16 mins which is 27 times more compared to global benchmark.
 - Course completion rate of 73.5% which is 7 times more compared to global benchmark
 - Video completion rate of 98.9% in comparison to global benchmark of 80-90%.

In the next section, we focus on the jobs across HR functions, that have been highly impacted due to technology. As these jobs are expected to undergo significant change in the future, they have been analysed to identify job adjacencies and to provide relevant career pathways within and outside HR.



Career Transitions for Roles Highly Impacted by Technology _____

In the previous sections, we explored the impact of technology on HR functions and jobs. Of the 27 jobs analysed in the study, eight jobs were identified as being highly impacted by technology. These jobs are at a high risk of displacement due to the automation of their tasks, which are largely routine and operational in nature. There will be significant changes in their job scope, requiring new technology-related skills to meet the new expectations. Individuals in these roles need to undergo significant reskilling and upskilling to remain relevant and to have access to career opportunities within and outside HR.

This study identified potential job adjacencies within and outside the HR function for these roles with high level of impact. 2.5 million job transitions prevalent across four countries were analysed [23] (see Section 2 for more details). The approach considered the overlap in skills between the roles, the nature of the new skills,

and whether the destination roles would be disrupted through automation. The feasibility of actual transition in Singapore to the most prevalent destination roles was validated by the local HR community.

The subsequent sub-sections cover the most prevalent and feasible job adjacencies within and outside HR for the eight jobs with a high level of impact of technology. Transitions within HR require crossfunctional skills that will be common across all roles in HR, such as data-driven storytelling, agile mindset, and business and financial acumen. The full list of crossfunctional skills can be found in the appendix section. The successful transitions outside HR require specific cross-functional skills, which can be applied to the new destination roles, and supplementary role-specific skills. As a guidance, we have provided the indicative cross-functional skills and skills top-up required for these transitions.



a. Executive / Associate, Operations and Technology

The Executive / Associate, Operations and Technology, supports the implementation of HR shared services and monitors the effectiveness of HR processes and systems. Their experience and skills enable transitions to the following roles within HR, as shown in Table 3.

The role has cross-functional skills in business process improvement, project management, and stakeholder management and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 4 below.

Table 3: Transitions within HR for Executive / Associate, Operations and Technology

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive / Associate,	HR Business Partner Executive	Omni-channel CommunicationsTechnology-driven Talent Assessment Strategy
Operations and Technology	HR Business Transformation Executive	Organisation TransformationTalent Experience Management

Table 4: Transitions outside HR for Executive / Associate, Operations and Technology

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive / Associate, Operations and Technology	Business Analyst	Business Strategy / AnalysisPricing Strategies
	Associate Management Consultant	Business DevelopmentCustomer Service
	IT Project Specialist / Executive	System IntegrationNetwork Administration
Cross-functional Skills		
Business Process ImprovementProject Management		Stakeholder Management

Success Stories

CapitaLand

Reskilling of HR System Support Team

CapitaLand's HR team embarked on several automation projects. The HRIS team stepped up from their traditional system support roles to reskill themselves with the knowledge of Robotic Process Automation (RPA). After acquiring the skill from the four-day RPA training organized by the company's Building Capability Framework (BCF), they started their journey to automate some HR processes, applying the skills they have learnt.

The HR Information System team took on the additional role of RPA ambassadors and have deployed a few RPA based projects that have helped to automate several transactional and repetitive tasks, such as data

verification for system migration and report generation. With RPA, the verification of the 90,500 documents that was migrated from the HR system of the acquired company was completed with 100% accuracy within two days. If verification were to be done manually, it would require ~900 man days. As the bots were built internally, no external consulting fees was incurred.



Singapore University of Technology and Design (SUTD)

Transition from HR Operations to Strategic HR Advisory / Data Analytics

With the "Best in Breed" technology adoption, SUTD's HR operation team was able to take up effective roles such as Business Partnering and more Strategic HR and Organisation Development Work. The adoption of technology also helped the resourcing function to automate 60-70% of manual work.

The investment in training the HR team in analytics and data visualisation further resulted in better efficiencies and decision making. Using data-driven insights, the HR team has increased the quality

of hiring and also resulted a six-figure dollar savings on headhunting costs.

In addition, the results from all these efforts were also translated into success stories that were presented to the board and received recognition at the board level.



b. Associate, Talent Management

The Associate, Talent Management, supports the implementation of transactional talent management activities. Their experience and skills enable transitions to the following roles within HR, as shown in Table 5.

The role has cross-functional skills in communications, stakeholder management, and time management can transit to the following roles outside HR. They will also need to top-up supplementary rolespecific skills to perform in these roles, as shown in Table 6 below.

Table 5: Transitions within HR for Associate, Talent Management

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Talent Management	HR Business Partner Executive	 Omni-channel Communications Technology-driven Talent Assessment Strategy
	Internal Recruiter	Date-led Talent AcquisitionSocial Media and Talent Marketing Strategy
	HR Experience Specialist	Talent Journey MappingContinuous Listening Strategy

Table 6: Transitions outside HR for Associate, Talent Management

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Talent Management	Associate, Change Management Consultant	Business Process ImprovementChange Management
	Associate, Data Analyst	Data VisualisationData Warehousing
	Media Planning Associate	Digital Marketing StrategySearch Engine Optimisation

Cross-functional Skills

Communications

Time Management

Stakeholder Management

c. Executive, Employee Experience and Relations

The Executive, Employee Experience & Relations, administers employee engagement surveys and implements programmes to improve employee engagement and wellness. Their experience and skills enable transitions to the following roles within HR, as shown in Table 7.

The role has cross-functional skills in customer service, problem solving, and time management and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 8 below.

Table 7: Transitions within HR for Executive, Employee Experience & Relations

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive, Employee Experience & Relations	HR Business Partner	Strategic Business AdvisoryWork Architecture and Job Redesign
	Talent Development Specialist	Learning and Development StrategyContent Marketing Strategy
	HR Analytics & Transformation Analyst	Organisation TransformationWorkplace Culture and Change Management

Table 8: Transitions outside HR for Executive, Employee Experience & Relations

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive, Employee Experience & Relations	Account Management Executive	 Market Research Customer Relationship Management (CRM) System
	Operations Associate / Coordinator	Quality Assurance / ControlRisk Management
	Business Development Executive	Account ManagementDigital Marketing
Cross-functional Skills		
 Customer Service 		■ Time Management

Problem Solving

d. Associate, Employee Experience & Relations

The Associate, Employee Experience & Relations, supports the administration of employee engagement and wellness programmes. Their and skills enable transitions to the following roles within HR, as shown in Table 9.

The role has cross-functional skills in communications, digital marketing, and event management and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 10 below.

Table 9: Transitions within HR for Associate, Employee Experience & Relations

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Employee Experience & Relations	HR Business Partner	Strategic Business AdvisoryWork Architecture and Job Redesign
	HR Analytics & Transformation Analyst	Organisation TransformationWorkplace Culture and Change Management

Table 10: Transitions outside HR for Associate, Employee Experience & Relations

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Employee Experience & Relations	Brand Management Associate	Brand DevelopmentDigital Strategy
	Communications Associate	Content CreationVideo / Copy Editing
	Digital Marketing Associate	Customer SegmentationSearch Engine Optimisation
Cross-functional Sk	ills	
CommunicationsDigital Marketing		■ Event Management

e. Associate, Learning & Organisation Development

The Associate, Learning & Organisation Development, supports the administration of learning and organisation development initiatives. Their experience and skills enable transitions to the following roles within HR, as shown in Table 11.

The role has cross-functional skills in data analysis, problem solving, and stakeholder engagement and can transit to the following roles outside HR. They will also need to top-up supplementary rolespecific skills to perform in these roles, as shown in Table 12 below.

Table 11: Transitions within HR for Associate, Learning & Organisation Development

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Learning & Organisation Development	Talent Development Associate	Learning and Development StrategySustainability and Digital Citizenship Governance
	Performance and Rewards Associate	 Continuous Performance Management Technology-driven Evaluation and Levelling
	HR Experience Specialist	Talent Journey MappingTalent Experience Management

Table 12: Transitions outside HR for Associate, Learning & Organisation Development

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
	Data Associate / Analyst	Market ResearchCustomer Relationship Management (CRM) System
Associate, Learning & Organisation Development	Marketing Associate	Social Media ManagementCampaign Planning
	Associate Management Consultant	Business DevelopmentMarket Research
Cross-functional Skills		

Stakeholder Engagement

Data Analysis

Problem Solving

Success Stories

SingTel

A 65-year old learns how to code

Valerie Yeong-Tan, a member of the Learning and Development team at Singtel, was 65 years old when she created her first bot in just 6 days.

With no prior software development experience, Valerie had learnt how to make bots through training sessions organised by the company. Named 'Valbot', the bot now helps Valerie to generate over 50 reports in just 12 minutes as compared to Valerie spending 4.5 hours in the past. Her stakeholders are also able to

receive quality reports 10 days earlier partially due to the elimination of human errors. Valerie is now using her new-found skills to automate other repetitive work processes such as preparing budgets.



Oversea-Chinese Banking Corporation (OCBC Bank)

From L&D Admin to LearnTech & Ops

With the launch of the Campus on Cloud, the first digital pilot projects aimed at reskilling and upskilling employees at OCBC, the job of the L&D team transformed significantly. The transition to a cloud system went hand in hand with the digital transformation of the department. The L&D team took about a year to upskill and learn the functionalities of the system as well as explore and fine tune processes through feedback from employees. With the transition, the work processes of the L&D team were more data-driven, and focused on data processing system analytics.

Yufang, who had initially joined the team as an L&D Admin Officer and used to spend a lot of her time in collection and processing of enrolment and attendance data manually, now, primarily specialises in high-touch programme management and digital tech support.

The digital transformation in the department has given her opportunities to develop her skills and knowledge on the job, improving her career development and personal growth. She now spends less time in administrative work and is able to provide consultation to employees on learning programmes and system functionalities. "Now, things are very different, since I have to take on tech functions like back-end testing for curriculum rollout," she adds. Since the implementation of Campus on Cloud, 13 processes have been digitalised and streamlined providing an achievement of \$68,000 savings due to the efficiencies gained.



f. Executive, Performance & Rewards

The Executive, Performance & Rewards, supports the implementation of performance management and conducts job evaluation exercises. Their experience and skills enable transitions to the following roles within HR, as shown in Table 13.

The role has cross-functional skills in project management, data analysis, and market research and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 14 below.

Table 13: Transitions within HR for Executive, Performance & Rewards

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive, Performance & Rewards	HR Business Partner	Strategic Business AdvisoryWork Architecture and Job Redesign
	Talent Management Executive	Career Journey DesignSuccession Planning

Table 14: Transitions outside HR for Executive, Performance & Rewards

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Executive,	Business Intelligence Executive	Enterprise Resource PlanningSystem Integration
Performance & Rewards	Digital Marketing Executive	Social Media MarketingContent Creation
Cross-functional Sk	ills	
Business Strategy / AnalysisData Analysis		■ Market Research

g. Associate, Performance & Rewards

The Associate Performance & Rewards supports the administration of performance management and compensation reimbursements. Their experience and skills enable transitions to the following roles within HR, as shown in Table 15.

The role has cross-functional skills in database administration, data analysis, and market research and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 16 below.

Table 15: Transitions within HR for Associate, Performance & Rewards

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Performance & Rewards	HR Business Partner	Strategic Business AdvisoryWork Architecture and Job Redesign
	Talent Management Associate	Career Journey DesignSuccession Planning

Table 16: Transitions outside HR for Associate, Performance & Rewards

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)		
Associate, Performance & Rewards	Project Analyst / Project Associate	Event Planning / ManagementContract Management		
	Digital Marketing / Brand Associate	Customer SegmentationSearch Engine Marketing		
	Performance Analyst	Financial ModellingProcess Reengineering		
Cross-functional Skills				
Database AdministrationData Analysis		Market Research		

h. Associate, Talent Attraction

The Associate, Talent Attraction, supports the execution of talent attraction initiatives. Their experience and skills enable transitions to the following roles within HR, as shown in Table 17.

The role has cross-functional skills in data analysis, project management, and stakeholder management and can transit to the following roles outside HR. They will also need to top-up supplementary role-specific skills to perform in these roles, as shown in Table 18 below.

Table 17: Transitions within HR for Associate, Talent Attraction

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)
Associate, Talent Attraction	Talent Management Associate	Talent Journey MappingContinuous Listening Strategy

Table 18: Transitions outside HR for Associate, Talent Attraction

Origin role	Top destination roles within HR	Skills top-up for transition (indicative)		
Associate, Talent Attraction	Corporate Strategy / Planning Analyst	Market ResearchKey Performance Index (KPI) Dashboard		
	Associate, Business Analyst	Business Process ImprovementFinancial Analysis		
	Project Associate / Analyst	Market ResearchAgile Methodologies		
Cross-functional Skills				
Data AnalysisProject Management		Stakeholder Management		

Success Stories

Accenture

Redesigning the candidate experience through modernisation of the recruiting function

Recruiters within Accenture have embraced Modern HR, recognising how technology can help them streamline their work, enabling them to develop new skillsets and focus on more value-adding activities within the organisation. Terence, a Campus Recruiter, is no longer only performing operational tasks for recruitment but is continuously assessing the market for new technologies that will help us transform our recruiting strategies. His efforts have allowed us to deploy innovations from the latest AR / VR technologies to deliver meaningful results and impact to our business, enhancing candidate experience and employer branding.

Chermaine and her team of recruiters were integral to the design and deployment of our Digital Assessment Centre, contributing their knowledge of recruitment and processes while embracing the transformational impact that this technology would have. They developed new skills in digital technologies such as chatbots, workflow, process automation, and an appreciation of the benefits that Modern technologically enabled HR can deliver to the organisation. From this experience, they became evangelists for a new way of working for Modern HR.



Fuji Xerox

Transition from Talent Attraction to HR Business Partner

Elizabeth Chin joined Fuji Xerox in 2016 as a Senior Executive in Talent Acquisition team. Her role included end-to-end recruitment and selection process - sourcing candidates, interviewing, conducting reference checks, making offers to the candidates, working on compensation proposals, drafting offer letters and preparing employee records for successful candidates manually.

After the HR transformation, Fuji Xerox streamlined its recruitment process by introducing digital recruitment and onboarding tools. This has enabled Elizabeth to transit from spending 70% of her time on sourcing, manually recruiting and onboarding employees to a full-fledged HRBP role. With the aid of AI technology, the system is able to process huge volumes of applications, screen candidates by gathering data and identify relevant potential profiles against the

required skillsets. Employees' records are now created digitally and freeing up a significant portion of her time, thus allowing Elizabeth to step up to be HR advisor to the Business Leaders. She's also able to more effectively enhance employee experience and engagement, as well as work on other HR initiatives for our people and adopt new skills.

Elizabeth has received several compliments from business leaders in having an agile mind, passion for the people and business. Her dedicated support to and statistics analysis helps business to improve on their operation's efficiency. She has progressed from administration HR to Associate Manager, HR Business Partner to a few lines of businesses.



Other Success Stories on reskilling and upskilling of HR professionals in the sector

Public Service Division (PSD)

Transformation of HR Roles to Implement RPA Process

The onboarding process involves the hard work and effort of various corporate departments such as Admin, IT, Registry and HR. PSD's HR team took the lead to work across departments to review and re-design the onboarding processes to facilitate the implementation of Robotic Process Automation (RPA). The RPA bot automated several manual tasks that used to be done by individual departments, such as raising user creation request forms for office equipment, and manual asset inventory tracking. With RPA, the time taken to complete transactional onboarding tasks reduced significantly from 76 mins per inflow to 7.5 mins. A junior executive took the initiative to acquire the skill of RPA through e-learning, and is now a 'bot expert' where she regularly updates the bot when there are changes to the individual tasks that have been automated.



DBS Bank

Upskilling of Talent Advisory Teams

After adoption of Jobs Intelligence Maestro (JIM), the DBS' HR talent advisors could focus on higher value activities such as active sourcing of candidates, competency-based interviews with applicants, advisory for hiring managers etc. Candidate drop off rate reduced from 15% to 3% with over 90% indicating positive experience with JIM. JIM also answered 97% of candidates' questions.



Merck

Upskilling of HRBP Teams

Cecilia Goo, Market HRBP at Merck Singapore, often spent weeks reconciling headcount or attrition data as she needs to pull data from different platforms and reconciling the data before she could analyse the information for the business. Very often, the data does not tally which means more manual efforts need to be put in to get a meaningful report. With the use of Visier's workforce analytics tool, she now able to compile real-time data. The best part of it is she now able to provide meaningful analytics and insights to the business, which helps to provide them with more targeted feedback.

At the same time, business leaders themselves are able to extract the same data. This means Cecilia no longer needs to "feed" them with the information, as the business can pull the data directly. With the tool, Cecilia no longer just generates reports but can now spend time advising her manager. This hence makes the HR role more strategic and impactful.



In closing

Disruption brought about by technology can be an opportunity for HR professionals to enhance their career prospects. To be future-ready, they need to recognise the importance of lifelong learning and undergo reskilling and upskilling to equip themselves with future focused transferable and role-specific skills. Their prior experience in HR also allows them to identify relevant transitions within HR before considering opportunities outside.

This transition for HR professionals will not occur in isolation and will require collective effort from business leaders and HR leaders in order to elevate the capabilities of HR. In the next section, we will discuss the call to action for various stakeholders and address key questions to guide stakeholders in building a strategic, value-adding HR function.



6. Transforming HR for Businesses

This study has shown that technology-driven changes are impacting all HR functions and jobs. As organisations transform to meet new challenges, there are increasing expectations for HR to deliver greater value and be a strategic enabler of business success. This demands concerted effort from business leaders, HR leaders and HR professionals. This section highlights the respective roles of these stakeholders in this endeavour.

Business Leaders

The true potential of HR delivering value to businesses remains unfulfilled. Business leaders, who are the ultimate decision makers on strategy and investments, are pivotal in our efforts to enhance the impact of HR. They need to champion the HR function, demand that HR be more strategic, and remove barriers to improve productivity for HR by supporting investments needed for HR technology and new skills development for HR. Creating a strategic, value-adding HR function demands investments in HR technology, skills enhancements to elevate HR's capabilities, and leading the development of a progressive and agile organisational mindset that embraces digitalisation. Here are key questions that can guide business leaders through this journey:

Why should I prioritise investments in HR technology?

HR technology creates the basic infrastructure you need to elevate performance and productivity of HR, as seen in the case studies. Given Singapore's economic and demographic shifts (including. digitalisation and rising gig workers), HR technology enables the use of data for more effective talent decisions. Accurate and real-time information can improve your workforce planning, decisions on investments in staff development and hiring, allowing you to be more agile and competitive.

HR technology can also improve employee experience by giving employees more autonomy

through self-service functions. The business benefits from freeing up HR bandwidth from transactional tasks, allowing them to focus on higher value activities that support improved business performance and stronger talent engagement.

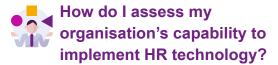


How do I start investing in HR technology?

This depends on the digital maturity of your organisation and the HR function. For most organisations that have yet to adopt HR technology, the focus should be on core HR processes such as compensation & benefits administration, talent attraction and performance management.

Organisations that have successfully implemented technology to support core HR processes can move to the next phase, which covers improvements to build a strong talent pool through upskilling and reskilling, as well as initiatives to build an engaged workforce and high-performance culture.

The push for digital transformation has never been stronger – With COVID-19, remote working arrangements are now the new normal. To ensure work gets done effectively, business leaders need to harness the power of technology to continuously drive workforce collaboration and engagement.



Tools such as the National Human Capital Diagnostic Tool (HCDT) can help with this assessment. HCDT can provide insights on the human capital maturity of your organisation and identify opportunities for improvements. The findings provide a good starting point for your organisation to explore the use of technology to address identified areas for improvements.



How do I measure the return on investment (ROI) of HR technology?

ROI can be assessed by using tangible and intangible metrics. Tangible metrics may include business performance, operating budget per unit of compensation or output per employee, absenteeism rate, average response, and turnaround time. Some examples of intangible metrics include employee engagement and wellness, social & talent branding. These metrics provide a quantitative evaluation of the value derived from the use of HR technology. Defining the specific outcomes that you seek to achieve with HR technology and identifying measures to track its impact would help build a strong business case and justify the investments.



I am in a Small & Medium Enterprise (SME). How can I better afford to make investments in HR technology?

Support is available to help you adopt HR technology, whether to raise capabilities within the organisation, enable implementation of technology, or to keep costs low. Examples of such support include:

- Subsidies provided by the Infocomm & Media Development Authority (IMDA) for project management services, allows SMEs to tap on a ready pool of skilled digital project managers who can help with project implementation.
- Enterprise Singapore (ESG)'s Productivity Solutions Grant (PSG) and IMDA's SME Go Digital initiative keep HR technology affordable for SMEs. The IMDA / ESG's SME Start Digital programme also includes HR technology solutions, which are being offered to SMEs when they sign up for essential services with selected telecommunications companies and banks.

HR Leaders

HR leaders drive their organisation's HR transformation as well as upskilling of the HR teams.

They lead the charge on HR technology adoption by building a strong business case to influence investments using data-driven insights. Here are key questions that can guide HR leaders through this journey:



Why should I invest in HR technology?

As seen in the case studies, technology enables HR to deliver higher value to the business. It automates routine processes, freeing up capacity for HR teams to take on strategic responsibilities. It also provides personalised solutions that enhance the talent experience. All organisations featured in this report, which include large organisations and SMEs, reported improvements in productivity and performance measures that outweigh the investments.



How can I elevate the capabilities of my HR function?

You can consider both formal training and onthe-job training (OJT) approaches. Examples of OJT approaches include opportunities to learn more about the business and its key drivers by observing relevant meetings or understanding more about the demands of business roles and other functional HR roles through shadowing or job rotations.

There are several excellent formal training programmes organised by tripartite agencies and education institutions. You can also tap on the IHRP certification process, which is designed to certify and develop well-rounded HR professionals.

Progressive organisations are taking training to another notch by experimenting with short-term squads or teams. This model, which brings together cross functional experts from different HR functions such as Data Analytics, Job Redesign, provides opportunities for cross functional teams to learn new skills from each other.

As reflected in the case studies on the reskilling / upskilling of HR, these developmental opportunities provide HR with enhanced skills to take on more

strategic responsibilities and uncover insights that shape the organisation's talent imperatives. This enables HR to craft powerful development and job redesign initiatives that help the organisation realise the positive impact of reskilling / upskilling initiatives on its performance and productivity.



I work in an SME. Where can I find more resources to support me on this journey?

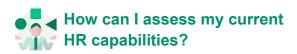
The SME portal (https://www.smeportal.sg/content/smeportal/en/home.html) contains a range of self-help resources such as HR tools, guides and templates to support HR service delivery. Bite sized e-learning materials are also available to strengthen HR capabilities.

HR Professionals

While business and HR leaders rethink the organisation's strategy for the future, HR professionals need to develop capabilities to meet new and enhanced responsibilities. It requires individuals to take ownership of their skills development through continuous learning and active participation in industry forums or networking sessions. As a HR professional, here is a list of critical points for consideration.



Technology is augmenting job responsibilities, requiring new capabilities. To stay relevant, you must undergo reskilling or risk being displaced. New skills could also position you for better career prospects and opportunities beyond your current role.



One common approach is through formal certification. In Singapore, you can go through the

IHRP certification, which is a national HR certification that serves as a benchmark for HR professionals. Individuals are awarded the certification based on a holistic and rigorous assessment process that assesses their depth and breadth of HR skills and knowledge.



Where can I find more information on the future HR capabilities required?

This study identified 8 cross-functional skills critical for all HR professionals. These skills equip HR with capabilities to drive business transformation, manage talent complexities and enable evolution of work. Supplementary role-specific skills are also identified to provide clarity on the unique skills required by each HR function. More details can be found in the appendix section.



How can I get additional funding to support my learning journey?

Many initiatives are in place to support HR professionals across all levels. Junior HR professionals can apply for the Singapore-Industry Scholarship (SgIS)-HR Continuing Education and Training grant. Midcareer HR professionals can apply for the SkillsFuture Study award to pursue HR courses that support their development and aspirations.

Moving Forward

HR cannot reinvent itself alone. Multiple stakeholders need to work together and build a future-ready HR workforce. With Singapore's unique tripartite arrangement and strong government support, there are ample resources to support organisations and individuals on this journey to elevate the HR profession, and create high impact, fulfilling HR careers.



7. Future Evolution for HR _

This study was designed to support the HR community in Singapore in their quest to transform through technology. We expect technology evolution to create even more opportunities for the HR function in the future, to adapt and deliver greater value to organisations. As automation becomes more pervasive, HR will need to expand their focus and sphere of influence in these five areas:

Human-machine combinations

As technology becomes more sophisticated, we expect more work to be performed by a combination of humans and machines. With machines handling more routine analyses and transactional interactions with

customers, an emerging area of expertise for HR would be to deconstruct and reconstruct jobs to deliver more value, using a combination of automation, and both inhouse and external talent. Once a job is redesigned, HR will need to define re-skilling pathways and ensure that the workforce is equipped with new capabilities to work alongside machines to deliver higher value-added human-centric work. They will also need to work closely with governments and academia to ensure that the talent is trained with the right skills in order to achieve optimal combinations of technology and humans.

HR will also play a leading role in advising businesses on the limitations of substituting jobs entirely with machines, advocating the continued use of humans to perform tasks that maintain a peoplecentric culture.

Case Study: Oversea-Chinese Banking Corporation (OCBC Bank)

OCBC Bank is the longest established Singapore bank, formed in 1932 from the merger of three local banks, the oldest of which was founded in 1912. It is now the second largest financial services group in Southeast Asia by assets and one of the world's most highly rated banks, with an Aa1 rating from Moody's. The financial industry has seen significant technology-led changes in the last few years. To remain competitive, OCBC Bank needed to define a digital transformation strategy that not only focused on redefining customer experience but also an enhanced employee experience. To this effect, the HR team redefined the transactional processes and introduced programmes to empower employees and enhance employee experience.

Digital transformation is a key part of OCBC's corporate strategy. HR played an active role in driving this through the Future Workforce Initiative, a bank-wide workforce transformation initiative launched to re-imagine the future of work. HR supported the transformation by identifying roles impacted by changes in business needs and developed transformation pathways for employees in these roles. Roles were redesigned, activities were augmented through technology, to empower people.

Further, to reskill and upskill employees for these redesigned roles, the Future Smart initiative was launched - a three-year learning plan to future-proof 30,000 employees across the bank.

The Future Smart initiative enabled the bank to train more than 23,000 employees through digital and fintech programmes. These allow employees to upskill and reskill and gain new skills for the future. Various jobs (e.g. bank tellers) have been upskilled to perform higher value-added financial services to enhance customer experience, transform the business and allow a more efficient workforce.

To support the change and provide bank executives with relevant leadership skills for the future, HR also defined various levels of leadership competencies in seven key areas – these include adaptability, leading courageously, fostering collaboration etc. These levels of leadership depths and competencies were also refreshed for a future focus. HR defined a new performance management and career development methodology to enable employees for the future of work, where more collaboration and dynamic project work under matrix reporting can be undertaken.

Source: Sharing from OCBC



Ethical dilemmas

As the possibilities for automation grow, there may be large-scale workforce displacement as companies leverage technology to maximise efficiency and productivity gains. The HR function must help leadership to navigate this potential conflict between the commercial mandate of the business and its social responsibility to the communities they operate in.

Another aspect is ethics in relation to personal data and privacy. HR will be operating in an increasingly digitised environment with access to sensitive and granular information on employees. The use of such data to make organisation decisions may infringe employees' privacy, placing employees' trust and organisation reputation at risk. Such privacy concerns will pose new ethical dilemmas for HR in future. It will require HR to supplement their strategic perspective and strong influencing skills with a solid grounding in the ethics to balance the conflicting interests and guide key stakeholders on such ethical decisions.

Case Study: IBM

IBM is a multi-national technology company. They created a social listening technology called Social Pulse and are keen to deploy it across the organisation. This technology allows them to monitor employee's personal social media posts and comments.

Considering the sensitivity of the information collected, IBM took steps to protect individual's confidentiality. One example is where comments are only analysed where the number of postings or size of the organisation ensures anonymity.

The use of social listening technology has demonstrated real business benefits. In one example, an employee started an online petition about the company not allowing workers to use ride-sharing services such as Uber. This led to a storm of social media chatter on the corporate intranet platform. Social Pulse detected the ground level sentiments quickly, and the company was able to act promptly and decisively to reverse the ban within 24 hours.

Source: The Grey Area, Ethical Dilemmas in HR Analytics, Perspectives from the Global Workforce, Nigel Guenole, PH.D., Sheri Feinzig, PH.D., David Green, 2018, IBM



Nurturing Talent

The use of an extended talent ecosystem beyond traditional employees will become increasingly prevalent. This shift could have a multitude of implications for the workforce. As traditional employment changes, it will potentially bring about mass displacement of semi-skilled and lower-skilled workers, forcing them to take on insecure gig work with limited employment protections. On the other end of the spectrum, individuals with highly specialised, sought after skills may choose to not get locked into full time employment and prefer to select the assignments they undertake and the organisations with whom they associate.

Dealing with these two very different types of talent will demand new workforce approaches. Organisations will need to define new policies, programmes and initiatives to ensure that work is designed and can be performed effectively by external talent, with proper supervision, performance assessment, etc. In addition, organisations will need to ensure they are attracting the best external talent, creating an attractive talent value proposition that appeals to the increasing plurality of employment relationships.

HR professionals will need to build skills associated with the challenges of working with these new talent categories. They will need to extend their role to be advocates for gig and contract workers. This involves tackling issues of diversity and inclusion, providing fair and equitable compensation, benefits, health and wellness programmes, as well as learning opportunities, and using technology to deliver a consistent talent experience across all talent segments.



Case Study: IBM

IBM developed an integrated work and development system to create a seamless work experience by matching skills to work arrangements, partners and clients. The system allows managers to tap into their internal skills base more effectively and empowers employees to volunteer for tasks that interest them and which they have the skills for.

Work is distributed to talent through an open talent marketplace. Those who have the skills, time and interest can complete the task. In return, individuals will have their skill achievements and project outcomes recognised on their online profile. This can also be extended to external talent (e.g. gig workers) if they meet the protocols and skills requirements. This work model further supports individual development by providing valuable insights on the skills that are in demand.

Source: World Economic Forum, HR4.0: Shaping People Strategies in the Fourth Industrial Revolution



Purpose-driven work

The workforce is looking for more in their jobs. Beyond pay checks, they are looking for opportunities that allow them to create positive impact on the society and inject meaning into their lives. This trend will increase, as work gets seen as an integral part of a sustainable, purpose-driven and meaningful lifestyle.

Developing a purpose-driven strategy has been shown to have a positive effect on employees. Willis Towers Watson found that, 75% of employees said their jobs were more fulfilling when they were provided with opportunities to make a positive impact at work; 70% of employees said they would be more loyal to a company that helped them contribute to important issues and, 58% of employees considered a company's social and environmental commitments when deciding where to work.

HR professionals of the future will need to create an organisation that is able to embed meaning

into work. They will need to continuously align the interest of the organisation with external stakeholders and work closely with governments and academia to realise the optimal combinations of technology and humans as well as ensure jobs have desired impact on society.

They will coach leaders to clearly articulate organisational purpose and drive alignment across the organisation. A clear "why", that articulates the value-added, and contribution of the organisation to society will attract and inspire this talent. Following through on this promise would require that work be redesigned to create meaningful and purpose-driven roles that allow talent to contribute to the organisation as well as the wider society. HR can measure the success of their purpose-driven strategy using metrics for recruitment, engagement and attrition [24].

Case Study: Unilever

Unilever is a large multinational consumer goods company. Their strategy 'Purpose led, Future Fit' aims to position Unilever as a purpose-led business that improves the lives of their consumers and communities.

To attract talent who share this same passion, Unilever created a purpose-driven talent value proposition, where Unilever is positioned as a place that empowers individuals to bring their purpose to life through the work they do. Individuals are given opportunities to work with brands that are loved and improve the lives of their consumers and communities. There is also a strong belief that individuals are not defined by their job titles, but through the positive impact they make. Hence, job titles are enhanced to include purpose driven statements that define each individual's passion and impact.

Unilever also created 'The Framework for the Future of Work' that aims to deliver a purpose-driven, future-fit social contract of work for employees that enables business transformation. Implementation of the Framework aims to ignite lifelong learning, drive procedural and process-driven change that aligns with their purpose-led agenda and redefines the Unilever system of work.

Source: World Economic Forum, HR4.0: Shaping People Strategies in the Fourth Industrial Revolution

^[24] Source: Can including ESG metrics in remuneration arrangements have a positive financial impact? Willis Towers Watson, Manuel Montecelos and Manuel Cervera June. 2020



Driving the culture

Culture will become a critical unifying force within organisations. In the words of Unilever CHRO Leena Nair, "culture is the new structure" [25]. It acts as the glue that unites the workforce through a set of common behaviours and attitudes. It acts as the North Star for every organisation, ensuring the delivery of purpose and a sense of belonging within the workforce. Defining and improving an organisation culture requires HR to embark on a continuous listening strategy, with a focus on employee experience.

The focus on culture and employee experience has consequences on business results. Research by Willis Towers Watson found that companies that provide a better employee experience are three times as likely to report high engagement and achieves 7% higher gross profit margins compared to companies with poor employee experience [26].

HR professionals of the future will play a key role in strengthening this unifying force within organisations using employee insights. They need to drive the creation of a culture that aligns with business strategy, organisation values and new ways of working.

Aspects of behavioural economics, including innovative ways to influence positive changes in behaviour, will be valuable skills to add to the HR repertoire. HR can measure success of their listening strategy using employee insights on sustainable engagement, organisation purpose, work and people enablers.

Conclusion

While the skills demanded of HR professionals continue to evolve, many HR teams have already started investing in building new capabilities and creating more agile and responsive people programmes and processes.

These inspiring stories have demonstrated the potential of HR in transforming the business. Harnessing technology as a force multiplier, HR now can broaden its reach and focus, becoming change leaders of work and the enabler of talent and business potential. Many possibilities await an HR function that seizes the opportunity to maximise its potential as a value creator for business.

Case Study:

Industrial Technology Organisation

A leading industrial technology company wanted to build a stronger sense of purpose and culture within the business. To identify the path forward, they used insights from the employee experience survey together with insights from stakeholder workshops to develop a detailed roadmap, which led to a review of HR priorities.

239 HR projects were reduced to these priority activities:

- Developed an employer brand that brings people into focus. The brand book guides how to use the employer brand and importantly connects the corporate brand elements, values, behaviours and vision.
- Developed a digital culture engagement strategy, stakeholder framework, persona map and communication plan.

- Created and produced a YouTube film that tells a "beyond tomorrow" story, to excite existing employees and engage with clients and candidates.
- Developed a campaign to promote human diversity, using different interventions to connect with people with different mind-sets and at different stages of the culture change.

The outcome was a future focused employee experience with behaviours, values and touchpoints aligned to the corporate purpose, culture and brand.

Source: Key trends shaping the employee engagement and listening space, Willis Towers Watson, Stephen Young, February 2019

Afterword

This study was concluded in January 2020. The afterword was written in August 2020, to address the impact of COVID-19 on businesses and their expectations from HR in managing the "new normal".

In 2019, less than 10% of business leaders from G20 and OECD countries considered the spread of infectious diseases as a looming global risk [27]. As the COVID-19 pandemic ravaged country after country, businesses had to respond rapidly, often with no prior comparable experience.

Initially, companies were concerned with protecting employees and providing a safe working environment, while ensuring business continuity. They were faced with difficult decisions to balance commercial and employee needs. HR teams developed and implemented policies for remote or split team working arrangements. To enable remote working, employees had to adopt technology in place of face to face interactions. In many

instances, HR professionals also had to develop plans to manage manpower costs for businesses to survive, and to take a longerterm view and avoid job cuts where possible. In several economies in Europe and the United States, furloughs were introduced to provide employees with continued benefits coverage even as pay was reduced or stopped.In some organisations, HR collaborated with their counterparts in other organisations or with unions to cross-deploy their workforce into sectors where demand held up. For example, Singapore Airlines cross-deployed cabin crew as care ambassadors in low-risk hospital wards, leveraging their existing skills in customer service to support basic patient care and patient service management [28].

As workplaces reopen, concerns have evolved towards recovery and adapting to the new normal. HR transformation, as articulated along the five themes in this study, must accelerate for HR to support businesses for a sustained recovery.



Enhance jobs and drive transformation

The pandemic has brought about a major shift in employers' mindsets regarding remote work. Business leaders are pushing for work to be redesigned in a way that allows for sustained remote working. A recent study of Fortune 500 CEOs [29] found that a quarter of them do not expect to go back to pre-COVID levels of workplace presence; and more than half do not expect business travel to revert to pre-COVID-19levels.

COVID-19 has also accelerated technology deployment in organisations as businesses seek to manage overreliance on labour-intensive processes. Businesses therefore face a conundrum: how to maximise the returns from automation, while remaining responsible to the communities they operate in? HR plays a critical role in responsible job redesign by guiding the business leaders to realise the optimal combinations of technology and human labour, and to ensure that jobs not only create value for the organisation, but also have meaning for the individual and society.



Equip workforce with future skills

The pandemic has accelerated the use of online learning platforms as organisations

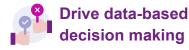
used this period to rapidly reskill and upskill their talent to facilitate cross deployments. This could involve transition into jobs with enhanced skills and / or to emerging jobs. As technology adoption accelerates job redesign, the need to reskill and upskill will be continuous, and HR will need to facilitate this workforce transition by continuously identifying new skills, as well as curating and delivering learning content through online learning platforms.

Beyond technical skills, line managers also need to be trained in new ways to manage the workforce in the new normal. HR will need to help leaders build skills such as empathy and emotional intelligence to deal with employee wellbeing and drive a change in management styles to assess staff performance and potential equitably in a remote working set-up.



Digitalise HR

With reduced physical presence in office for many groups of workers, the traditional format of HR service delivery will need to change. HR **technology adoption** has already seen an acceleration in the seamless delivery of **HR services** to dispersed employee populations. This is expected to continue at pace, freeing-up HR's bandwidth to focus on the strategic elements of business transformation and productivity.



As more work processes move online, HR will have access to talent and organisational data, more than ever before. This will accelerate the use of advanced analytics such as codification of intangible metrics, identification of linkages between talent metrics and business outcomes to drive data-based talent decisions. HR needs to balance between collecting and analysing increasing amounts of employee data to aid decision making, while still respecting employees' privacy and preventing a "surveillance culture", which could poison employer-employee relations.

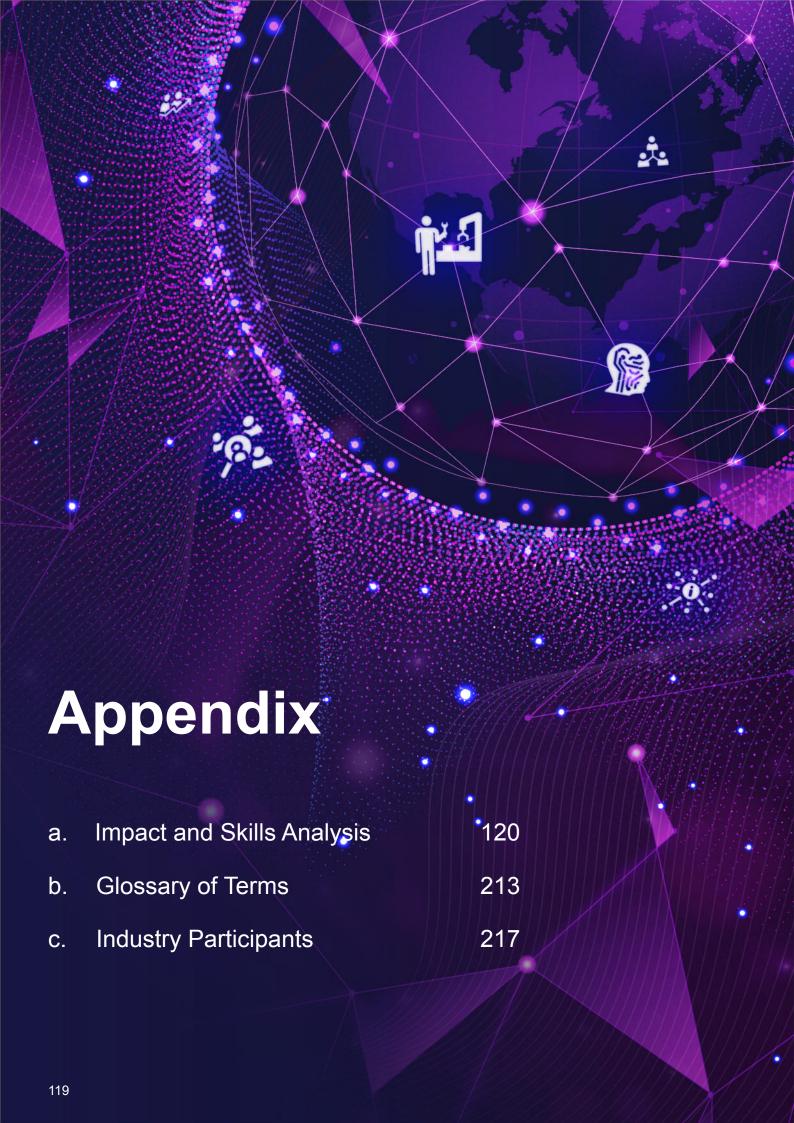
While the pandemic has caused macroeconomic. social and business disruptions across the world, it has presented HR with an opportunity to take bold action and guide business leaders to enable employees to contribute to their organisations regardless of their mode of working. In addition, as businesses reset operations, social and ethical implications on the workforce will be a key consideration for HR to ensure a sustainable recovery. It is up to every HR professional to respond to this opportunity, to be an effective partner in business transformation, and to create more ethical and sustainable organisations and workplaces.



Build consumer-grade experiences

COVID-19 has highlighted the need to focus on employee wellbeing, to alleviate employees' anxiety regarding the unprecedent impact of the pandemic on working life. This ranges from psychological distress in dealing with a job loss to work-life balance issues. Technology allows HR to be more effective in this, by gauging employee sentiment real time, to inform the design of employee benefits, assistance programmes or virtual wellness classes in line with employees' actual needs.

As organisations continue work-fromhome arrangements, HR will play a critical role to reinforce the organisation's culture and continue staff engagement in a remote working environment. Technology enabled solutions for onboarding and learning that enhance employee experience and productivity will be particularly critical in reinforcing culture, and are expected to become mainstream going forward.





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Appendix | a. Impact and Skills Analysis Willis Towers Watson In I'l'In I

Head, Operations and Technology

Job Family: **Operations and Technology**

Impact level: Medium



- This role will design the HR technology roadmap and strategise the link between HR and business systems.
- Develop the business case to convince senior stakeholders to adopt technology solutions.
- Develop data architecture for HR, data governance framework and ensuring data security.
- Drive change management for technology adoption across HR.



Artificial Intelligence (AI) & Machine Learning (ML)



Automation (RPA)





EXPECTATIONS TODAY EXPECTATIONS WITHIN THREE YEARS NEW APPROACHES TO TASKS Designing Integrated HR Technology Architecture and Roadmap Formulate organisation-wide HR operational Review and formulate organisation-wide HR operational policies and procedures, keeping Application Programming Interface (APIs) and cloud-based systems will allow integration

- policies, procedures and systems initiatives
- Evaluate emerging technology against HR operations needs and infrastructure capabilities
- in view the need for digitalisation
- [NEW] Develop an integrated HR technology roadmap to support business and
- Spearhead research on new and innovative technologies across HR processes to enhance personalisation and consumer-grade experience and improve operational efficiency through automation
- [NEW] Share thought leadership on new aspects of technology opportunities and risks such as potential biasness of AI, nudge-based technology, and integration of pointbased versus platform solutions to drive decisions

- of various applications and platforms across organisation-wide systems to enable seamless data flow
- Collaborate with Chief Information Officer (CIO) to assess organisation's technology needs and design technology roadmap for seamless interface across various solutions and platforms

- Assess HR function's capability and readiness in operationalising strategic HR initiatives
- Drive digitalisation and automation initiatives for HR processes and prepare a business case for technological investments to drive implementation
- Assess current HR processes for efficiency and opportunities for optimisation and / or automation based on business and talent needs by leveraging data analysis
- [NEW] Recommend suitable and scalable technology to influence build vs. buy decisions, by presenting a business case for technological investments and implementation
- Advanced data analytics will be used to analyse insights on feedback and effectiveness of solutions vs. business and talent needs
- Off-the-shelf solutions and existing applications will need to be assessed for user-centricity
- Technologies such as RPA, AI / ML may be explored for suitability and intelligent automation / optimisation of various HR processes and service delivery

Implementing HR Technology and Data Architecture

- Establish objectives of the HR systems and prioritise based on needs
- Finalise system selection based on budgets, employee and business priorities
- Develop HR technology implementation plan based on the integrated HR technology roadmap, budgets, talent and business priorities and needs
- In-depth knowledge of the technology applications for off-the shelf solutions will support decision on "best-in-class" technology for implementation that allows seamless data flow across the organisation
- Principles of design thinking, user experience and user interface design will help to ensure user-centricity

Head, Operations and Technology

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
 Design HR data architecture based on the type of data and analysis required to enhance organisation productivity and effectiveness 	 Design HR data architecture and data governance framework to establish the linkages between HR and business systems and ensure data security 	 Knowledge of databases, platforms for aggregation, data cleaning and analytics, and APIs will ensure clean and useable HR databases Knowledge of data security and privacy considerations will ensure frameworks and systems are designed for secure use and flow of data 	
 Oversee the implementation and roll-out of HR technology solutions throughout the organisation Obtain buy-in from Senior Management on adoption of HR systems and develop plans to roll-out technology implementation 	 Oversee the implementation and roll-out of HR technology solutions throughout the organisation and management of technology portfolio across HR [NEW] Foster strong collaboration across teams and drive user-centric design to enhance user experience Drive transformation and communication plans, and influence Senior Management decisions on technological initiatives and system updates and increase adoption rates across the organisation 	 Communication platforms such as mobile applications and social media enable real- time information sharing and feedback to enhance talent experience in adopting new technologies 	
	Evaluating Effectiveness and User Experience of HR Processes and Systems		
 Establish criteria and metrics to determine effectiveness of HR processes and systems 	 Establish criteria and metrics to determine effectiveness of HR processes and systems [NEW] Design user experience based on feedback from business and talent 	 Al and analytics embedded in HR systems will provide real-time collection of targeted data on HR technology and systems performance and productivity Most off-the-shelf systems will have basic metrics and analytics built in and additional metrics can be added on as defined by business and talent 	
 Evaluate agreements with vendors based on evaluation of HR systems' performance 	 Assess existing technology based on established metrics and business and talent needs to evaluate current performance, potential available and scalable technology 	 Data-driven insights will enable HR to draw inter-linkages to connect effectiveness of initiatives to business outcomes 	
	Lead Demand-driven HR Analytics		
 Conceptualise new data models to address identified business and talent data needs 	 Lead development of efficient data flows and develop demand-driven analytics based on business and talent data needs [NEW] Lead the development of configurable talent data models that present desired analysis 	 Integrated systems and data architecture will ensure interlinking of data across multiple sources such as performance management, employee feedback surveys, and talent sentiments Al and analytics embedded in HR systems will enable the development of data-driven insights 	
 Derive business insights using basic analysis and recommend optimal solutions Lead decision-making with relevant stakeholders 	 Derive specific data insights and provide actionable recommendations to impact business outcomes across talent lifecycle [NEW] Oversee the development of HR research models and formulate hypothesis 	 Advanced analytics will be used to provide insights on targeted issues for business outcomes such as flight risks, challenges talent face at work, and future capability gaps 	
to enhance business and HR performance	based on initial trends and explore linkages and correlations		

Head, Operations and Technology

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Integrated Technology Roadmap Development	Design organisation technology roadmap strategy to drive seamless interface between existing and upcoming technologies and optimise HR systems, and enhance accessibility and functionality for talent and business
Application Programming Interfaces (APIs) Design	Drive integration of various applications and platforms across organisation-wide systems to design the interactions between various software components and maintain an overview of routines and communication protocols regarding these interactions
Data Architecture Design	Lead the design of a robust data architecture that seamlessly directs data flow across the organisation
Data Security and Privacy	Adopt an overarching view of tools and approaches for data security and privacy such as privacy-by-design to design data governance framework and drive compliance with regulatory requirements and prevent business and reputational risks from data breaches
User Experience / User Interface Design	Formulate guiding principles and concepts for intended user experience and interfaces, and direct development of prototypes and customised graphical user interfaces to anticipate user requirements and adopt industry best practices
Product Testing	Evaluate results of testing for digital products and services, and develop technology implementation strategy that enhance feasibility, functionality and effectiveness for optimal product experience for business and talent
Technology Vendor Management	Establish strategic collaborative and impactful partnerships that take into consideration the long-term mutual benefits for both organisation and technology vendors to drive technology transformation across HR
Robotic Process Automation Programming	Evaluate HR processes against RPA technology to define opportunities as well as prioritise HR processes for automation based on business organisation and talent needs

Head, Operations and Technology

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will be an advisor for ongoing technology-enabled design and analytics of HR processes, and drive penetration of technology across HR. The role will have a futuristic view of technology and utilise disruptive technologies to enhance existing technology capabilities such as Artificial Intelligence-enabled (AI) data models. The role will spearhead digital transformation for HR and continue to enhance system capabilities through advanced platform-based technologies such as edge computing.

Appendix | a. Impact and Skills Analysis Willis Towers Watson In I'l'In I

Manager, Operations and Technology

Job Family: **Operations and Technology**

Impact level: Medium



- This role will evolve to manage the integrated technology portfolio across HR processes.
- Plan and lead the implementation for technology solutions in HR.
- Implement data architecture for HR, data governance framework and ensuring data security.
- Recommend automation and outsourcing opportunities to enable digital transformation across HR.





Artificial Intelligence (AI) & Machine Learning (ML)





EXPECTATIONS TODAY EXPECTATIONS WITHIN THREE YEARS NEW APPROACHES TO TASKS Designing an Integrated HR Technology Architecture and Roadmap Determine HR operations needs and Determine HR operations needs and lead the team on the implementation of strategic HR APIs and cloud-based systems will allow integration of various applications and platforms infrastructure capabilities to introduce strategic across organisation-wide systems and enable seamless data flow operations initiatives HR operations initiatives and lead the team in [NEW] Define technical requirements for HR solutions based on the understanding of Implementation of technology changes and seamless interface between various the implementation of strategic HR operations business and talent needs as well as HR operations technology solutions in collaboration with relevant technical experts based on in-depth initiatives knowledge of technology solutions [NEW] Evaluate feasibility of technology solutions and integration to support the development of an integrated technology roadmap, including existing / new system capabilities, milestones, resources, etc. • Off-the-shelf solutions and existing applications will need to be assessed for application Introduce process and systems based on [NEW] Explore opportunities for optimisation and / or automation of current HR the function's competence and readiness for processes as well as build vs. buy decisions based on suitability and scalability of within HR integrating initiatives the technology Technologies such as RPA, AI / ML may be explored for suitability and integrated into [NEW] Assess effectiveness of technology change initiatives to provide a business HR systems case for technological investments Advanced data analytics will provide insights on feedback and effectiveness of technologies on business outcomes Implementing HR Technology and Data Architecture Identify operational needs for HR systems to Engage business leaders and talent to secure buy-in for technological initiatives aligned Understand technology requirements of stakeholders through greater discussions present business case in alignment to business to their needs and desired user experience and collaborations requirements and budget In-depth knowledge of databases, platforms for aggregation, data cleaning and analytics, and APIs will enable the development of consistent, clean, and useable HR databases

Manager, Operations and Technology

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Determine functionalities and customisations to be incorporated into HR systems 	 [NEW] Drive implementation by experimenting with technologies and manage the technology portfolio across HR 	 Principles of design thinking, user experience, and user interface design will be applied when testing and implementing systems to ensure user-centricity
	 Lead the implementation of seamless HR data architecture with strong focus on user experience 	 Advanced analytics of effectiveness metrics from systems will support testing of digital products and services to evaluate feasibility and functionality
Task does not exist in current role	■ [NEW] Define policies for data governance to ensure data security and privacy	 In-depth knowledge of data security and privacy considerations will ensure frameworks and systems are designed for secure use and flow of data
 Design and lead implementation plan and roll- out of HR systems 	Execute technology implementation plan based on the integrated technology roadmap to meet business and talent needs	 Knowledge of Application Programming Interfaces (APIs) to support the integration of various applications and platforms
	 Develop transformation and communication plans to implement new technology solutions / initiatives and drive adoption 	 Communication platforms and mobile applications etc. will enable real-time information sharing and feedback to enhance talent experience in adopting new technologies
	Evaluating Effectiveness and User Experience of HR Processes a	and Systems
Design feedback tools to gather inputs on effectiveness of HR processes and systems and	 Explore and introduce new technologies to ensure accurate tracking on the effectiveness of HR processes and systems 	 Al and analytics embedded in the systems will provide real-time collection of targeted data on HR technology and systems performance
evaluate them against requirements	 Analyse the business and user feedback and provide recommendations for design of high- quality user experience 	 Most off-the-shelf systems will have basic metrics and analytics built in and additional metrics can be added on as defined by business and talent
 Monitor compliance of HR systems with data and regulatory requirements 	 [NEW] Analyse data trends and proactively identify interventions on compliance violation issues and prevent data breaches 	 Al and ML embedded within cloud-based solutions will enable real-time updates of compliance information automatically and send alerts when compliance issues are identified
 Evaluate effectiveness of HR systems and processes to identify improvement opportunities for implementation 	 Lead continuous evaluation of technology and HR processes against the business and talent needs to enhance user experience for HR processes and systems 	 In-depth knowledge of automation tools and technology applications and user needs will enhance existing HR processes and systems
	Implement Demand-driven HR Analytics	
 Liaise with business to understand and fine-tune talent analytics models based on their needs 	 Liaise with business to define data analytics and metrics based on talent data needs as well as develop efficient data flows to support analytics 	 Integrated systems and data architecture will enable interlinking of data across multiple sources to provide on demand dashboards to make talent decisions
	 [NEW] Identify and recommend visualisation tools and dashboards necessary for configurable talent data models 	
 Analyse talent data to identify risks and opportunities and prepare action plan for 	 Analyse talent data to generate specific insights on risks, opportunities, and issues to support decision-making for each of the various HR functions 	 Advanced predictive analytics will be used to provide insights on targeted issues for business outcomes
enhancing business and HR performance	 [NEW] Lead the development of HR research models linked to business outcomes and drive analysis based on the hypothesis from initial trends 	

Manager, Operations and Technology

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Integrated Technology Roadmap Development	Implement new technologies and ensure seamless interface between existing and upcoming technologies to optimise HR processes for talent and business
Application Programming Interfaces (APIs) Design	Demonstrate understanding of routines and communication protocols of the interactions between various software components to lead integration of applications and platforms across organisation-wide systems
Data Architecture Design	Implement data architecture plans and ensure data architecture is robust and effective in supporting data needs within the organisation
Data Security and Privacy	Collaborate with experts to define requirements for data security and privacy tools and policies such as privacy-by-design to ensure compliance with regulatory requirements and prevent business and reputational risks from data breaches
User Experience / User Interface Design	Create user experience design concepts and flow charts, and collaborate with experts to drive the development of graphical user interfaces. Challenge the experts on limitations to drive best outcomes to align with the desired user experience
Product Testing	Lead testing of digital products and services to evaluate feasibility, functionality and effectiveness, and determine alignment to business and talent needs
Technology Vendor Management	Collaborate with technology vendors by leveraging technology insights and experience to provide inputs for decision making process on technology for the various HR processes
Robotic Process Automation Programming	Research and implement opportunities for automation of HR processes based on organisation and talent needs

Manager, Operations and Technology

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will be key in **driving implementation of ongoing technology-enabled process design** and **analytics** across HR functions. The role will be proficient at **anticipating technology disruption** that would impact the organisation. The role will continue **to support the enhancement of the technology roadmap** through implementation of sophisticated technology that provides a **consumer-grade experience**.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'I'III

Executive / Associate, Operations and Technology

Job Family: **Operations and Technology**

Impact level: High



- This role will evolve into a digital HR role supporting the implementation and maintenance of integrated HR technology portfolio and talent data architecture.
- Support implementation of data governance framework for HR and data security policies.
- Perform data analytics and support digital transformation by researching latest technologies.



Artificial Intelligence (AI) & Machine Learning (ML)



Data
Security

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
[NEW] Implement HR Technology Roadmap and Data Architecture			
 Tasks in current role focus on supporting the implementation of HR shared services and activities under Support HR Initiatives and 	 [NEW] Outline technical requirements for HR systems based on business and talent needs, and identify gaps in existing system capabilities 	 Knowledge of off-the-shelf solutions and technologies such as RPA, AI / ML for process improvement 	
Systems	 [NEW] Research new technologies and provide inputs on suitability and scalability of technology to support opportunities for HR process automation and / or optimisation 	 Knowledge of Application Programming Interfaces (APIs) to support the integration of various applications and platforms 	
Task does not exist in current role	 [NEW] Provide guidance on the technical requirements of the technology solutions to the development team during the design and development phase of technology solutions [NEW] Test the solution and provide feedback for improvement and alignment with expected requirements and features 	 Principles of design thinking, user experience, and user interface design will be applied when testing and implementing systems to ensure user-centricity 	
Task does not exist in current role Task does not exist in current role	 [NEW] Collaborate with technical teams to map out data flows across HR and business systems to support the implementation of HR data architecture [NEW] Research best practices and challenges in data governance and data security and provide inputs for policy development [NEW] Collaborate with IT teams to communicate data governance policies and guidelines to educate talent and prevent data breaches 	 Knowledge of local data protection and privacy laws, databases, platforms and tools for integration of systems such as APIs to enable data aggregation 	
	Support HR Initiatives and Systems		
 Coordinate and manage the delivery of HR services to employees based on strategic HR initiatives Monitor daily HR system operations and identify errors for troubleshooting 	 Task enhanced and subsumed under implementation of HR Technology Roadmap and Data Architecture 	NA	
 Resolve HR standard operating procedures related issues and queries from other functions 	Task substituted by technology	 Al chatbots will automate the resolution of standard policy-related, process-related and procedural enquires 	

Executive / Associate, Operations and Technology

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Support communication activities on digital initiatives such as leave application systems, benefits administrations etc. 	Task substituted by technology	 Use of communication platforms and devices to enable real-time information sharing and feedback
Task does not exist in current role	 [NEW] Identify technology platforms to support and communicate implementation of HR plans and initiatives 	Knowledge of new and innovative communication platforms
	Monitoring Effectiveness of HR Processes and System	ns
 Verify documentation of processes for completeness, accuracy and compliance with HR policies and procedures 	Task substituted by technology	 Al and ML will automate document validation process with minimal human intervention
Task does not exist in current role	 [NEW] Analyse technology solutions and process metrics and develop insights on efficiency, effectiveness and user-centricity of the process and solutions 	 Advanced analytics to assess efficiency, effectiveness and user-centricity of the HR technology solutions
		 In-depth knowledge of both automation tools and technology solutions (and user needs) for enhancement
 Review HR operating policies and existing processes and suggest potential improvements to enhance HR services 	Review HR operating policies and existing processes to suggest enhancement due to technology and future workforce considerations	 Technologies such as RPA and AI will be tested for suitability and in-depth knowledge of off-the-shelf solutions and other technologies in the solutioning process will support decisions for adoption within HR
to enhance the services	Liaise with stakeholders to facilitate technology implementation and maintenance	decisions for adoption within the
	 Drive adoption of self-service models / new technology initiatives for HR process and solutions enhancement through conducting of user acceptance test 	
	Utilising Data Analytics	
 Examine data to ensure consistency and quality 	Task substituted by technology	Al and ML will automate much of data cleaning and checking
Task does not exist in current role	■ [NEW] Develop visualisation tools and dashboards needed for standard talent data	Al and analytics embedded in the systems will provide real-time collection of targeted data
	models to equip HR with insights and proactive monitoring of key metrics	 In-depth knowledge of visualisation and data pooling tools and solutions to support data- based insights for decision-making
 Conduct data analysis and provide reports on insights to stakeholders 	 Conduct analysis of talent data to identify specific insights for issues across the various HR functions 	 Advanced analytics embedded with AI will be able to provide insights across multiple variables
	 [NEW] Develop HR research models and analysis based on the hypothesis from initial trends to support various HR functions in identifying linkage to business outcomes 	 Advanced predictive analytics will provide insights on specific issues to achieve business outcomes

Executive / Associate, Operations and Technology

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions	
Integrated Technology Roadmap Development	Outline technical requirements for new technologies and identify areas of improvement for HR processes	
Application Programming Interfaces (APIs) Design	Apply basic knowledge of routines and communication protocols of the interactions between software components to support the integration of applications and platforms	
Data Architecture Design	Support implementation of robust data architecture that is efficient and effective in directing seamless data flow across the organisation	
Data Security and Privacy	Research on the tools and approaches for data security and privacy as well as relevant regulatory requirements to support the implementation of data governance guidelines	
User Experience / User Interface Design	Analyse desired user experience and suggest requirements for functionalities, information flows and graphical user interfaces	
Product Testing	Support testing of digital products and services to evaluate feasibility, functionality and effectiveness	
Technology Vendor Management	Liaise with technology vendors on required technology specifications	
Robotic Process Automation Programming	Use available tools to build RPA bots to meet organisational and talent needs	

Executive / Associate, Operations and Technology

Future skills* for all HR executives / associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

The role will support on-going technology enablement of the entire talent experience. In-depth knowledge of various technologies such as consumer-grade interface and seamless data architecture will be required to support technology implementation and transformation. The role will support the adoption of transformation and disruptive technology changes across the organisation.

Appendix | a. Impact and Skills Analysis WillisTowersWatson III'I'III

Head, Performance and Rewards

Job Family: **Performance and Rewards**

Impact level: Medium



- The role will have increased focus on the design of agile, personalised, differentiated and flexible rewards framework.
- Guide the development of a continuous performance management framework to incorporate real-time, frequent and multi-sourced feedback.
- Greater use of data analytics and Al-based algorithms to guide refinements of performance and rewards frameworks.
- Use technologies for delivery of differentiated and personalised rewards and multi-sourced performance management feedback.







Artificial Intelligence (AI) & Machine Learning (ML)





Robotic Process
Automation (RPA)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Design of Continuous Performance Management	
 Guide the development of performance management strategy and framework 	 Guide the development of performance management strategy and framework to account for real-time, frequent, and multi-sourced feedback 	 Cloud-based platforms and mobile applications will enable the collection of real-time, frequent, and multi-sourced feedback
 Drive implementation and adoption of performance management framework and systems 	 Drive the implementation and adoption of continuous performance management framework and systems 	 Mobile applications with nudging capabilities will send alerts / reminders to talent and managers for performance management process as well as benefits initiatives
 Engage business to understand strategy and co-develop organisation-wide key performance indicators (KPIs) 	 Engage business to co-develop organisation-wide strategic key performance indicators (KPIs) by leveraging data-driven insights 	 Advanced data analytics will enable generation of real-time reports and insights on business performance
 Coach senior leaders to manage staff's performance 	 Coach senior leaders in managing talent performance through use of data- driven insights 	Sentiment analysis and data analytics will provide insights on performance data
■ Task does not exist in current role	 [NEW] Develop linkages between performance data and business outcomes and draw insights to enhance productivity 	 Machine learning compensation AI enables automatic generation of visuals of HR, C&B metrics and linking talent and business performances
		 Advanced data analytics will generate insights and establish linkages between performance data and business outcomes
Design of Agile Rewards and Recognition		
 Design compensation strategies and framework aligned to the organisation's needs Drive the implementation and adoption of 	 Design agile, personalised, differentiated and flexible rewards and recognition frameworks aligned to the organisation's needs Drive the implementation and adoption of agile compensation frameworks to reward 	 AI-powered systems combined with sentiment analysis will offer insights on salaries and pay mechanisms as well as talent sentiments on rewards and recognition programmes to guide decisions
compensation frameworks	and recognise diverse talent groups across the broader talent ecosystem such as elements of skills-based pay, discount programmes	 Interactive analytics platform embedded with AI and machine learning algorithms will analyse real-time skills data to calculate granular valuations of skills and their impact on pay

Head, Performance and Rewards

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
 Guide translation of compensation philosophy into the compensation framework 	 Develop job evaluation and benchmarking strategies that allow flexibility and differentiation of rewards and recognition programmes of the organisation for diverse talent groups and the broader talent ecosystem [NEW] Develop executive compensation philosophy for the rewards and recognition of senior leaders taking into consideration diversity and inclusion, and pay equity 	 Al-enabled systems will enhance job evaluations for diverse groups of talent Al-powered systems will generate real-time deep level comparisons of salaries for senior leaders to ensure fairness and equity Interactive analytics platform embedded with Al and machine learning algorithms will analyse real-time skills data to calculate granular valuations of skills and their impact on pay 	
Task does not exist in current role	 [NEW] Guide analyses that use intangibles such as talent sentiments and behavioural economics to evaluate the impact of rewards on attraction, motivation, and retention 	 Sentiment analysis will provide insights on satisfaction with new frameworks and policies to make improvements Data analytics will generate insights to understand linkages between rewards and motivation / productivity 	
Task does not exist in current role	 [NEW] Oversee governance strategies for compensation disclosure requirements, advocating greater transparency in remuneration practices by providing advice to senior leaders 	 Al-power systems will facilitate data collation, analysis, and tracking of variable compensation pay-out versus performance 	
Design of Benefits and Wellness Management			
 Design benefits policies / programmes to be aligned with employer brand and employee value proposition while keeping within the budget 	 Develop strategy for the design of holistic benefits and wellness policies and programmes that integrates technology and offer diverse talent groups greater flexibility and personalisation while keeping within budget 	 Technology such as mobile applications will allow personalisation as well as ease of access to benefits and wellness programmes 	
 Secure stakeholders' commitment / investment for programmes 	 Synthesise data to articulate impact and effectiveness of benefits and wellness programmes to secure senior leaders' commitment and investment 	 Sentiment analysis will analyse feedback and provide insights on experience and satisfaction of diverse talent groups with the benefits and wellness programmes Al and advanced analytics will help to determine benefits and wellness programme effectiveness and Return on Investment (ROI) 	
■ Task does not exist in current role	[NEW] Leverage behavioural drivers to promote the usage of benefit and wellness programmes	 Data analysis of talent data, sentiments, and feedback will provide insights on experience of diverse talent groups to optimise benefits practices and enhance take-up rates Behaviour tracking on mobile applications and user analytics will generate insights on benefits and wellness consumption patterns 	

Head, Performance and Rewards

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Continuous Performance Management	Design continuous performance management strategy and framework to account for real-time feedback and spearhead continuous dialogues and ongoing performance review strategies for agile team structures and diverse talent groups
Agile and Personalised Pay Philosophy and Structures	Lead design and implementation of agile, personalised, and flexible pay philosophy and structures to enable flexible incentives and adaptability for compensation of diverse talent groups aligned to organisational needs
Technology-driven Evaluation and Levelling	Lead the development of an innovative approach with technology integration for evaluation and levelling of redesigned jobs
Behavioural Drivers	Provide thought leadership to shape and promote best practices within the organisation on the use of behavioural levers and pay elements to drive enhancement of compensation and benefits strategy
Compensation Governance	Establish compensation governance frameworks and strategies integrated with technology to enhance compliance with compensation disclosure requirement and promote transparency of compensation practices

Head, Performance and Rewards

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will continue to partner with business to **spearhead segmented** / **personalised approaches** for rewards and performance management frameworks. The role will explore innovative approaches such as peer-based and democratic salary increments to influence total rewards philosophy and develop a vibrant talent marketplace (including contingent workers). The role will **advocate greater transparency** on pay equity and other key **people governance metrics** for disclosures.

Appendix | a. Impact and Skills Analysis WillisTowersWatson III'I'III

Manager, Performance and Rewards

Job Family: **Performance and Rewards**

Impact level: Medium



- The role will have increased focus on the implementation of agile, personalised, differentiated and flexible rewards and benefits framework.
- Design a continuous performance management framework, policies and processes to incorporate real-time, frequent and multi-sourced feedback.
- Greater use of data analytics and Al-based algorithms for market benchmarking, review of pay increments as well as analysis of feedback.
- Use of technologies for delivery of differentiated and personalised rewards and multi-sourced performance feedback.







Robotic Process
Automation (RPA)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Design of Continuous Performance Management	
 Develop performance management framework, policies, and processes 	 Develop performance management frameworks, policies and processes that include real-time, frequent and multi-sourced assessment and feedback Develop the implementation plans for adoption of continuous performance management framework and systems 	 Cloud-based platforms and mobile applications will enable the collection of real-time, frequent and multi-sourced feedback Mobile applications with nudging capabilities will send alerts / reminders to talent and managers for performance management process as well as benefits initiatives
 Deliver effective communications on performance management programmes 	 Develop personalised communication messages to engage diverse talent groups on the continuous performance management programme [NEW] Collaborate with HRBPs to coach managers on having continuous dialogues and ongoing performance review with talent 	 Enterprise platforms or mobile applications will deliver segmented / personalised communications with Al-powered chatbots serving as a first-level support to handle basic queries
 Monitor and evaluate the effectiveness of the performance management system 	 Evaluate the effectiveness of performance management system by analysing feedback and linking performance data to business outcomes 	 RPA, AI-powered systems and machine learning will automate report generation Sentiment analysis on talent sentiments and feedback gathered via internal platforms, will provide insights on talent experience with performance management framework for diverse talent groups
	Design of Agile Rewards and Recognition	
 Conduct job evaluation and salary benchmarking to offer competitive compensation packages 	 Integrate and implement technology for job evaluation and benchmarking approaches to provide greater flexibility and differentiation of rewards and recognition for diverse talent groups and the broader talent ecosystem [NEW] Develop agile, personalised, differentiated and flexible rewards, and recognition mechanisms such as elements of skills-based pay, incentive pay, and discount programmes 	 AI-enabled systems will enhance job evaluations for diverse groups of talent AI-powered systems will generate real-time deep level comparisons of salaries for senior leaders to ensure fairness and equity Interactive analytics platform embedded with AI and machine learning algorithms will analyse real-time skills data to calculate granular valuations of skills and their impact on pay
 Communicate compensation policies and programmes and resolve issues / queries related to policies and procedures 	 Develop personalised communication toolkits and resolve disputes regarding compensation policies and programmes for diverse talent groups 	 Enterprise platforms or mobile applications will deliver segmented / personalised communications with Al-powered chatbots serving as a first-level support to handle basic queries

Manager, Performance and Rewards

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
■ Task does not exist in current role	 [NEW] Analyse the value of intangibles, such as talent sentiments and behavioural economics, to determine the impact of rewards on attraction, motivation, and retention 	 Sentiment analysis will analyse feedback and provide insights on experience of diverse talent groups Data analytics will generate insights to understand linkages between rewards and motivation / productivity
Task does not exist in current role	[NEW] Conduct audits on compensation data to ensure compliance to compensation disclosure requirements	 RPA, AI-powered systems and machine learning will detect possible anomalies and compliance issues
Design of Benefits and Wellness Management		
 Implement benefits including health and wellness programmes 	 Implement flexible benefits and curate innovative and holistic wellness programmes that meet the needs of the broader talent ecosystem 	 Sentiment analysis will analyse feedback and provide insights on experience of diverse talent groups
	• Integrate technology that allows flexibility and personalisation of benefits and wellness programmes	 Technology such as mobile applications will allow personalisation as well as ease of access to benefits and wellness programmes
 Inform talent about benefits and address issues / queries 	 Develop personalised communication toolkits and resolve disputes regarding benefits and wellness programmes for diverse talent groups 	 Enterprise platforms or mobile applications will deliver segmented / personalised communications with AI-powered chatbots serving as a first-level support to handle basic queries
■ Task does not exist in current role	 [NEW] Lead analysis of talent feedback, health data, behaviours, and benefits and wellness consumption patterns to introduce improvements and enhance take-up rates 	 Data analysis of talent data, sentiments, and feedback will provide insights on experience of diverse talent groups to optimise benefits practices and enhance take-up rates
	 [NEW] Assess the impact of benefits and wellness programmes on overall health and wellness of talent 	 Al and advanced analytics will help to determine benefits and wellness programme effectiveness and ROI

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Continuous Performance Management	Develop the process for implementation and adoption of continuous performance management framework through use of real-time feedback and communication platforms, and drive continuous dialogues and ongoing performance review for agile team structures and diverse talent groups
Agile and Personalised Pay Philosophy and Structures	Develop agile, personalised, and flexible pay philosophy and structures to enhance adaptability of the organisation for compensation of diverse talent groups
Technology-driven Evaluation and Levelling	Provide inputs to define new approaches and integrate technology for job evaluation and levelling of redesigned jobs
Behavioural Drivers	Integrate knowledge of behavioural levers and pay elements including psychological, cognitive, emotional, cultural and social factors on economic decision making to lead enhancement of compensation and benefits programmes
Compensation Governance	Implement integration of compensation governance frameworks with technology for enhancement of compliance with compensation disclosure requirement

Manager, Performance and Rewards

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will continue to manage the implementation of **segmented / personalised approaches** for rewards and performance management frameworks and design **innovative programmes** / **incentives** to create a vibrant talent marketplace. There will be a greater emphasis on using other types of talent data beyond performance, e.g. organisation network analysis and sentiment analysis, to derive **deeper linkages** between behaviours and productivity.

Executive, Performance and Rewards

Job Family:
Performance and Rewards

Impact level: High



- The role will support the implementation of continuous performance management and development of personalised and bite-sized communications to educate talent groups.
- Support the implementation of agile, personalised, differentiated and flexible rewards and benefits framework.
- Conduct research and testing of technology applications to deliver required talent experiences.
- Use data analytics to test hypotheses on performance and productivity.

Data
Analytics



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EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
Implement Continuous Performance Management		
 Develop communications to inform talent about performance review cycles 	 Support the development of personalised and bite-sized communications and alerts on continuous performance reviews 	 Mobile applications with nudging capabilities will send alerts / reminders to talent and managers for performance management processes
 Gather feedback on effectiveness of performance management programmes 	 [NEW] Analyse talent feedback and suggest solutions to address gaps in performance management programmes 	RPA and AI-powered systems will collect data on talent experiences
■ Task does not exist in current role	 [NEW] Conduct research on technologies to provide suggestions that enhance performance management process [NEW] Conduct user acceptance test to ensure delivery of required talent experiences for performance management systems 	 Al and machine learning will be used to provide insights on talent experiences Sentiment analysis will analyse talent feedback
Task does not exist in current role	 [NEW] Analyse performance and productivity metrics to test hypothesis and derive in- depth insights on the effectiveness of performance management systems 	 Integrated systems, AI and advanced data analytics will correlate performance management and productivity metrics to enable optimisation of performance management framework such as calibration of performance reviews across different departments
 Document action plans and assessment results for poor performers 	Task substituted by technology	RPA, Al-powered systems and machine learning will automate the documentation process
Implement Agile Compensation & Benefits		
 Benchmark compensation and benefits (C&B) programmes against industry practices 	 [NEW] Articulate to talent the rationale and objectives of new C&B practices such as variable pay mechanisms, skills-based pay, and holistic benefits and wellness programmes [NEW] Create customised C&B benchmarks that provide segmented comparisons and analysis of pay equity for various talent groups 	 Al-powered systems and machine learning algorithms will generate real-time deep level comparisons of salaries for talent groups to address compensation gaps and ensure fairness and equity

Executive, Performance and Rewards

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Conduct job analysis and evaluations to propose employees' job size 	 [NEW] Articulate to talent the rationale and methodology for innovative job evaluation and benchmarking approaches Leverage technology to apply job evaluation and benchmarking methodology to assess the job size in an agile manner, considering the broader talent ecosystem 	 Al-enabled job evaluation systems and machine learning algorithm applied with knowledge of job evaluation and benchmarking approaches / methodology will enhance job evaluations for diverse groups of talent
 Formulate communications on C&B policies and programmes 	 Support development of personalised and bite-sized communications such as games or C&B quizzes to educate talent on C&B programmes and encourage take-up 	 Enterprise platforms or mobile applications will be used to deliver segmented / personalised communications
Administer Compensation & Benefits		
 Check accuracy of data in reports (e.g. payroll, employee contribution, annual salary reports) 	Task substituted by technology	 RPA, AI-powered systems and machine learning will be used to automate report generation and ensure accuracy of data
 Verify validity / accuracy of employees' claim submissions 	Task substituted by technology	■ RPA, AI-powered systems and machine learning will be used to automate verification of claims
 Develop frequently asked questions (FAQs) and responses on C&B matters 	 Provide tailored responses to complex questions on C&B matters for diverse groups of talent 	 AI-powered chatbots will serve as a first-level support to handle basic queries

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Continuous Performance Management	Implement continuous performance management processes through communication platforms to enable ongoing performance review for agile team structures and diverse talent groups
Agile and Personalised Pay Philosophy and Structures	Identify the new compensation practices (e.g. pay for performance, elements of skills-based pay, customised compensation) that will be suitable for the business, by leveraging data-driven insights to address business needs for diverse talent groups
Technology-driven Evaluation and Levelling	Conduct job evaluation and levelling process by leveraging data-driven insight to evaluate scope of work or tasks of redesigned jobs
Behavioural Drivers	Leverage understanding of the principles of behavioural levers and pay elements to implement enhancement initiatives for compensation and benefits programmes

Executive, Performance and Rewards

Future skills* for all HR executives

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

The role will continue to support the enhancements for continuous **performance management** and **agile compensation and benefits frameworks**. There will be an increased focus on analysing behaviours **and productivity** to guide business decisions on productivity improvements.

Associate, Performance and Rewards

Job Family:
Performance and Rewards

Impact level: High



- The role will support the delivery of personalised and bite-sized communications to educate talent groups for agile, personalised, differentiated and flexible rewards and benefits as well as continuous performance management.
- Support research and testing of technology applications to deliver required talent experiences.
- Greater use of data analytics to support the testing of hypotheses and derive insights.

Data
Analytics



Artificial Intelligence (AI) & Machine Learning (ML)



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Robotic Process
Automation (RPA)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Implement Continuous Performance Management	
 Inform employees on performance review cycles and timelines and respond to enquires 	 Assist in delivering personalised and bite-sized communication on continuous performance reviews Support the resolution of complex queries related to performance management 	 Enterprise platforms or mobile applications will be used to deliver segmented / personalised communications Mobile applications with nudging capabilities will send alerts / reminders to talent and managers for performance management process as well as benefits initiatives Al-powered chatbots will serve as a first-level support to handle basic queries
Task does not exist in current role	 [NEW] Support research initiatives to identify possible technologies to enhance performance management process [NEW] Assist in conducting user acceptance test to ensure delivery of required talent experiences in the performance management process 	 Al and machine learning will be used to provide insights on talent experiences Sentiment analysis will analyse talent feedback
 Generate performance management reports to provide status updates 	Task substituted by technology	 RPA, AI-powered systems, and machine learning will be used to automate report generation
Task does not exist in current role	 [NEW] Support the analysis of performance and productivity metrics to test hypothesis and derive initial insights on the effectiveness of performance management system 	 Integrated systems, AI, and advanced data analytics will enable generation of insights to optimise performance management framework
Implement Agile Compensation & Benefits		
 Consolidate information on industry compensation and benefits (C&B) practices 	 Conduct analysis of industry C&B practices to suggest innovative practices such as pay for performance, flexible rewards programme, and customised compensation that address business issues 	 AI-powered systems and machine learning algorithms such as python scripts and web- crawling will augment the identification of industry C&B practices by mining data sources and combine with data analytics to provide insights on C&B practices that will meet business and talent needs

Associate, Performance and Rewards

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Gather employee data and feedback on benefits schemes 	 [NEW] Analyse talent data and feedback to understand the needs and preferences across talent groups as well as obtain insights to benefits take-up rates and consumption behaviours 	 RPA will automate the collection and collation of data across HR systems Data analytics of talent data and feedback will be used to optimise benefits practices and enhance take-up rates
 Source for external vendors to deliver benefits programmes 	 [NEW] Support the curation of holistic benefits and wellness programmes that meet needs of talent groups 	 Al-powered systems will automate sourcing process to shortlist possible vendors for the delivery of required benefits and wellness programmes
Administer Compensation & Benefits		
 Generate reports on payroll, employee contributions, annual salary, benefit claims etc. 	Task substituted by technology	 RPA, AI-powered systems and machine learning will be used to automate report generation
 Administer compensation reimbursement based on employee submissions 	Task substituted by technology	 RPA, AI-powered systems and machine learning will be used to automate reimbursement process
 Respond to employee queries on C&B matters 	 Support the resolution of complex queries on C&B matters 	Al-powered chatbots will serve as a first-level support to handle basic queries

Future skills* (Role-specific)

Focus areas	Descriptions	
Continuous Performance Management	Deliver communication on continuous performance management processes through communication platforms to encourage ongoing performance review for agile team structures and diverse talent groups	
Agile and Personalised Pay Philosophy and Structures	Research on industry compensation practices to identify new practices (e.g. pay for performance, elements of skills-based pay, customised compensation) for diverse talent groups	
Technology-driven Evaluation and Levelling	Apply the concepts of job evaluation and levelling to scope of work or tasks of redesigned jobs through data-driven insights	
Behavioural Drivers	Analyse talent data and feedback to understand behavioural levers and pay elements that affect talent to support enhancement of compensation and benefits initiatives	

Associate, Performance and Rewards

Future skills* for all HR associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions	
Business and Financial Acumen	Support talent initiatives by applying knowledge of business and basic financial indicators as well as workforce analytics	
Data-driven Story Telling	Develop initial data-based findings and visualisations to support a clear and logical narrative	
People Analytics	Conduct initial analysis of talent and business metrics, including intangible metrics, and support the development of predictive models to derive meaningful insights	
Organisational Behaviour and Change Management	Support change management initiatives and communications to talent by guiding them on use of technology for real-time multidirectional engagement and helping to answer any specific queries regarding the change initiatives	
Agile Mindset	Research on agile ways of working, structures and processes and provide inputs on ways of enhancing adaptability and collaboration within the organisation	
HR Technology Adoption	Research the HR technology landscape to identify potential technologies to enhance the talent lifecycle	
Relationships and Communication	Identify own emotional patterns and communication style to effectively work and communicate with stakeholders and support the execution of communication plans for relevant stakeholders	
Progressive and Inclusive Workforce Policy Implementation	Support implementation and continuous feedback collection for workforce policies across diverse talent groups through technology tools and platforms	

Beyond three years

The role will continue supporting the communication of **continuous performance management** and **agile compensation and benefits frameworks**. There will be an increased focus on **data analytics** to test hypothesis and derive insights to guide business decisions on productivity improvements.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Head, HR Business Partner

Job Family: **HR Business Partner**

Impact level: Low



- The role will evolve into a consultative partner for the business and utilise data-driven insights to guide leaders on talent investments to future proof the business.
- Orchestrate work architecture for the business, lead job redesign and strategic workforce planning initiatives aligned with business outcomes and culture.
- The role will need enhanced business acumen, relationship building and storytelling skills to drive changes that impact business outcomes.



Artificial Intelligence (AI) & Machine Learning (ML)



Mobile Applications

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Work Architecture	
 Consult with business leaders to align HR strategies to organisation's business strategy 	 Influence decisions of business leaders on HR strategies by leveraging data-driven insights to demonstrate the impact of HR on business strategy and metrics based on the linkage between talent metrics on business performance 	 Advanced data analytics will provide insights and linkage of human capital and talent metrics such as talent experience and turnover rate to business metrics such as operating and recruitment expense
 Develop solutions to guide business leaders on implications of workforce supply and demand 	 [NEW] Evaluate business trends to project long-term skills requirements Formulate talent strategies for managing workforce challenges and capability planning by leveraging the broader talent ecosystem [NEW] Lead technology integration into work tasks to redesign jobs and optimise human-machine collaboration for the enhancement of long-term productivity across the business 	 AI / web data extraction and crawling will provide data and insights on future workforce demands and skills Workforce analytics platforms will enable HR to determine future desired workforce structures In-depth knowledge of the broader talent ecosystem will allow for quicker identification of capabilities and agility to work around adhoc requirements and workforce challenges AI-enabled software will enable the redesign of jobs to achieve optimal combination of talent and automation
 Collaborate with business to establish requirements for change management initiatives 	 [NEW] Develop strategic workforce plans and job redesign initiatives using insights from change management initiatives 	 Data analytics and AI will analyse market data and workforce trends to predict change to workforce structure and jobs for achieving business outcomes
 Secure buy-in from senior management for change management to increase organisation's efficiency 	Develop and present business case to challenge decision-making for talent and skills requirements through data-driven insights obtained from real-time multidirectional engagement across the business	 Organisational network analysis will provide insights on collaboration and information sharing across the organisation to enable identification of influencers that will enhance the promotion of change management initiatives Al-enabled nudging for monitoring and tracking of communication messages to provide alerts if messages are ignored / unread
	Driving Talent Experience	
 Collaborate with business leaders to establish standards and priority positions for recruitment of leadership roles 	 Collaborate with business leaders to establish priority positions for recruitment Proactively network and scout for talent with leadership capabilities to build a leadership pipeline for the business 	 Synthesis of qualitative assessment and data analytics will provide holistic insights to enhance decision making for leadership roles

Head, HR Business Partner

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Uphold principles of fair and unbiased recruitment practices across the business 	 Engage business leaders to promote and uphold principles of fair and unbiased recruitment practices across the business 	 Al-based sourcing and screening will reduce bias in selection, speed-up the recruitment process and enhance candidate experience
 Advocate employee value proposition to enhance employer branding for recruitment 	 Embed employer branding and Talent Value Proposition (TVP) into business behaviours and actions through various channels to attract talent for business needs [NEW] Guide business leader and managers and empower them to become brand ambassadors for the organisation to promote employer branding and TVP 	 Data analytics on talent metrics such as talent sentiments of the organisation's brand and talent experience will provide insights on how to enhance the employer branding and TVP to share and guide business leaders and managers
 Recommend onboarding processes to enhance retention of new hires 	 Provide advice to the Talent Acquisition team on onboarding talent journeys to integrate technology into the design of onboarding processes based on feedback from business leaders and talent 	 Data analytics on feedback from business leaders and talent will provide insights to enhance onboarding processes tailored to the business needs for sharing with the Talent Acquisition team
Partner with business to promote employee engagement programmes, foster diverse	 Guide the development of HR policies and frameworks and partner with the business to champion diversity and inclusion 	 Social media, chatbots and mobile applications coupled with proactive nudging will enable the collection of real-time feedback and sentiments data
and inclusive employment culture and lead labour relations	 [NEW] Ensure coaching / counselling of talent within the business to foster behaviours aligned with organisation's culture and values 	 Automated web programming will deliver sentiment analysis across professional & social media platforms and provide insights to manage talent relations
 Secure buy-in from business leaders on talent policies and programmes 	 Guide the business on talent intervention using data-driven insights to enhance flexibility and personalisation aligned with business needs 	 Advanced data analytics will provide insights and linkage of talent solutions to business outcomes
Driving Talent Management		
 Establish organisation learning and development strategies to meet business needs 	 Establish learning and development strategies through data-driven insights to build future skills that are critical to the business 	 Analysis of historical talent data will provide insights on existing capability and skills gaps while AI will enable industrial scans and provide market-focused insights Analysis of learning consumption data will provide insights to guide business leaders in identifying effective learning topics and channels for the business and to share with the Learning and Organisation Development team
 Guide business leaders to establish talent frameworks and processes for senior positions in accordance to business strategy 	 Drive the implementation of talent frameworks and solutions that meets talent needs in accordance to business strategy and data-driven insights 	 Internal enterprise resource planning systems will enhance management of talent capabilities within organisation
 Partner with business to identify critical positions for succession planning and develop high- performing talent to meet business needs 	 Lead proactive engagement with business leaders to develop robust succession plan for key positions [NEW] Influence business leaders to drive self-directed career management among talent through tech-enabled talent platforms that provides information on possible career pathways, skills requirements, and development opportunities 	 Predictive analytics will provide insights on possible risks such as potential derailment on development programmes or opportunities such as talent career aspirations Data analytics will provide holistic insights for grooming of key positions based on talent performance and traits for sharing with the business Al and analytics embedded in HR systems will provide holistic insights to suitable career pathways as well as right talent for sharing with business leaders for decision making

Head, HR Business Partner

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Guide business leaders to manage high potential talent exits 	 Design offboarding strategies to enhance talent experience as part of the employer brand and enable continuous engagement and relationship with alumni network to increase appeal for possible returns or partnerships 	 Communication platforms and devices will enable continuous engagement for positive exits

Future skills* (Role-specific)

Focus areas	Descriptions
Strategic Business and HR Advisory	Coach business leaders and provide data-driven insights on opportunities by leveraging data analytics to influence and align talent strategies to business needs
Talent Experience Management	Drive innovative strategies and solutions to enhance talent experience across the talent lifecycle considering different talent personas
Technology-driven Talent Assessment Strategy	Strategise talent assessment approach to ensure seamless integration with technology solutions aligned with business needs and overall talent experience strategy
Work Architecture and Job Redesign	Design work architecture and strategic workforce plans to guide job redesign and optimise human-machine collaboration across the business for enhancement of efficiency and capabilities
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences

Head, HR Business Partner

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will become the internal consultant for talent and capability building within the business and influence business leaders on talent decisions. The role will drive the reinvention and redesigning of jobs by pushing boundaries on talent practices and work architecture to prepare the business for the future. There will be continued focus on developing strategies for personalised talent journeys and experiences to meet aspirations and needs of a multi-generational workforce. The role will also be a champion for the extended talent ecosystem to ensure a balance between talent and business priorities.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'III

Manager, HR Business Partner

Job Family: **HR Business Partner**

Impact level: Medium



- The role will evolve to a more **consultative role providing data-driven insights** on talent issues and solutions to the business.
- Optimise work architecture for the business, implement job redesign and strategic workforce planning initiatives.
- The role will need enhanced business acumen, relationship building and storytelling skills to influence the business outcomes.



Artificial Intelligence (AI) & Machine Learning (ML)



Mobile Applications

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
EXFECTATIONS TODAT		NEW AFFROAGILS TO TAGRO	
	Work Architecture		
 Collaborate with line managers to forecast future skills requirements 	 Predict talent and skills requirements through data-driven insights 	 Advanced data analytics and predictive analytics will provide insights on talent and skills requirements for the future and linkage to business metrics such as net profit margin and sales growth 	
 Develop a short-term plan for deployment of workforce to maximise productivity 	 Develop a long-term strategic workforce plan to ensure skills availability through broader talent ecosystem and agile teams and enable flexibility and adaptability of the business [NEW] Analyse work architecture to optimise long-term productivity through job redesign and technology integration for the optimisation of human-machine collaboration 	 AI / web data extraction and crawling will provide data and insights on future workforce demands and skills Workforce analytics platforms will enable HR to determine future desired workforce structures In-depth knowledge of the extended talent ecosystem will provide the agility to work around sudden workforce challenges AI-enabled software will enable the redesign of jobs to achieve optimal combination of talent and automation 	
 Evaluate effectiveness of change interventions 	 [NEW] Implement workforce plans and job redesign initiatives using insights from change interventions 	 Data analytics and AI will analyse market data and workforce trends to predict changes needed to workforce structure and jobs for achieving business outcomes 	
 Engage senior management to obtain buy-in and support for change interventions 	 Engage senior management and talent to influence business decisions on talent and skills requirements through data-driven insights obtained from real-time multidirectional engagement across the business 	 Organisational network analysis will provide insights on collaboration and information sharing across the organisation to enable identification of influencers that will enhance the promotion of change management initiatives Al-enabled nudging for monitoring and tracking of communication messages to provide alerts if messages are ignored / unread 	
	Driving Talent Experience		
 Identify and recommend sourcing channels for priority positions 	 Maintain relationships with critical talent and potential hires, beyond sourcing channels to proactively building a pipeline for priority capabilities and positions for the business 	Data analytics will provide insights on recruitment patterns to enhance talent sourcing	

Manager, HR Business Partner

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
Task does not exist in current role	 [NEW] Suggest innovative candidate sourcing / recruitment strategies for proactive scouting tailored to the business needs 	 Strategic partnerships formed with institutes of higher learning will source talent with required skills Social media and programmatic advertising will facilitate engagement and pipeline building
 Provide advice on fair and unbiased recruitment practices 	 Provide advice to managers on fair and unbiased recruitment practices across the business 	 AI-based sourcing and screening will reduce bias in selection and speed-up the recruitment process
 Implement standardised onboarding processes for new hires 	Task substituted by technology	 Al and social robotics will enable the delivery of personalised and self-directed experience for new hires
 Guide managers on the onboarding processes required for new hires 	 Work with the Talent Acquisition team to ensure design of onboarding includes proactive nudges and mechanisms to prompt managers and new hires [NEW] Guide implementation of preboarding and onboarding talent journeys with managers and derive insights from applications on feedback for sharing with the Talent Acquisition team 	 Data analytics on feedback from managers and talent will provide insights to enhance preboarding and onboarding processes tailored to the business needs for sharing with the Talent Acquisition team
 Partner with business to promote employee engagement programmes, foster diverse and inclusive employment culture and lead labour relations 	 Provide inputs for HR policies to advocate diversity and inclusion within the business [NEW] Provide insights from real-time feedback to enhance talent experience initiatives and manage talent behaviours across the business 	 Social media, chatbots and mobile applications coupled with proactive nudging will enable the collection of real-time feedback and sentiments data Automated web programming embedded with AI and analytics will deliver sentiment analysis across professional and social platforms to provide insights for managing talent relations
 Secure buy-in from business leaders on talent policies and programmes 	 Serve as a consultative partner and provide data-driven insights and solutions to address challenges of business and talent 	 Advanced data analytics will be used to analyse insights on talent solutions and provide linkages to business outcomes
	Driving Talent Management	
 Define learning and development requirements based on business and talent capability needs 	Proactively identify future skills and learning and development requirements that are critical to the business through industry insights	 Analysis of historical talent data will provide insights on existing capability and skills gaps while AI will enable industrial scans and provide market-focused insights Analysis of learning consumption data will provide insights to guide managers in identifying effective learning topics for their talent and to share with the Learning and Organisation Development team
 Guide managers in the application of talent management frameworks and processes 	 Recommend personalised, talent-centric approaches based on data-driven insights in alignment to business strategy 	 Internal enterprise resource planning systems will enhance management of talent capabilities within organisation

Manager, HR Business Partner

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Facilitate talent review activities with managers to groom high-performing talent to meet business needs 	 Guide managers on talent decisions through insights from data [NEW] Maintain close relationships with high-performing talent / talent with critical capabilities to understand aspirations and motivation 	 Predictive analytics will provide insights on possible risks such as flight risk and potential derailments on development programmes to enable mitigation plans Data analytics will provide holistic insights for grooming of high-performing talent based on both performance and traits for sharing with managers and the business Al and analytics embedded in HR systems will enable real-time collection of data on career development programmes and sentiment analysis and provide holistic insights to suitable career pathways as well as right talent for sharing with managers for decision making
Guide line managers on managing talent exits	 Guide design of offboarding and talent transition experiences and maintain purposeful relationships with alumni network 	AI-enabled software will enable real-time monitoring of social media platforms to provide alerts on job status updates of alumni network or high-potential talent

Future skills* (Role-specific)

Focus areas	Descriptions
Strategic Business and HR Advisory	Guide the business and recommend talent solutions in accordance to insights obtained from data analytics in alignment to business needs and overall talent strategies
Talent Experience Management	Develop solutions to enhance talent experience for different talent personas across the talent lifecycle
Technology-driven Talent Assessment Strategy	Integrate technology solutions to enhance talent sourcing and assessment processes to meet identified specific talent requirements for the business
Work Architecture and Job Redesign	Facilitate the optimisation and restructuring of work activities in the business and implement strategic workforce plans and job redesign initiatives to optimise human-machine collaboration
Omni-channel Communication	Drive use of relevant communication touchpoints suitable for diverse groups of talent ensuring consistency of talent experiences across the platforms

Manager, HR Business Partner

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will become the **master talent builder** for the business, reinventing and redesigning jobs through the work architecture. The role will be embedded deeper within the business, playing a **key consultative role** to drive and influence business decisions and drive competitive advantage. There will be a **continued focus on personalised talent experiences and strategies** to meet demands from multi-generational workforce. The role will also be an **advocate for the broader talent ecosystem**, ensuring rights and perspectives of talent are balanced against competing business priorities.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Head, Talent Attraction

Job Family: **Talent Attraction**

Impact level: Medium



- The role will focus on developing proactive scouting and talent attraction strategies closely aligned to future business needs.
- Lead solutioning for talent resourcing and leverage market and industry research insights to develop data-driven talent attraction strategies.
- Develop **employer branding and talent value proposition** for diverse groups of talent.
- Enhance candidate and onboarding experience through technology.









Social Robotics



Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
Drive Data-driven HR Strategy and Resource Planning		
 Develop HR strategy and financial budget for people-related spending on talent attraction activities 	 Drive HR strategy, sourcing plans, and financial budget based on business strategy and future needs considering the broader talent ecosystem 	 Enterprise level workforce planning tools with analytics capabilities will enable predictive modelling of skills and facilitate budgeting
 Design the approach and methodology for talent resourcing to address manpower needs 	 Design the approach and methodology for talent resourcing through competitive intelligence research and considering diverse groups of talents 	 AI-powered research will provide greater clarity into talent / capability demand and supply trends in the industry
Review current and future talent supply and demand in terms of manpower and bench	 Lead proactive mitigation of future demand and supply challenges based on bench strength of capabilities, manpower requirements coupled with analysis of potential attrition 	 Applicant tracking systems and Al-based sourcing tools will allow more effective talent resourcing and planning
strength of capabilities	and new hire performance	 Data analytics will enable proactive actions, such as predicting attrition and new hire failures
Task does not exist in current role	 [NEW] Leverage talent market and industry research insights to develop differentiated and data-driven talent attraction strategies for diverse groups of talent 	 Data analytics and AI will enable the segmentation of candidate personas for development of data-driven talent attraction strategies
	Talent Value Proposition and Sourcing	
Task does not exist in current role	 [NEW] Drive competitive intelligence research and creation of candidate personas for targeted and strategic sourcing of talent for leadership positions 	 AI-powered research will provide greater clarity into talent / capability demand and supply trends in the industry
		 Data analytics and AI will enable the development of multiple personas to facilitate personalised candidate outreach
 Align all employee lifecycle activities to the employer brand and employee value proposition 	 Drive the development and communication of the employer brand and Talent Value Proposition (TVP) 	Communication channels such as corporate social media platforms and mobile applications will be used to communicate and reinforce employer brand and TVP as well
(EVP)	 [NEW] Engage business leaders to introduce communication platforms and obtain buy-in for employer branding and TVP, encouraging them to embed the TVP into organisational practices across the broader talent ecosystem 	as enable continuous real-time feedback on the employer brand and TVP

Head, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Monitor and evaluate the merits and appropriateness of various recruitment channels for sourcing of candidates Establish hiring standards in consultation with business leaders to fill senior positions 	 Drive data-driven approach to evaluate merits and appropriateness of various recruitment channels for sourcing of candidates based on future skills and potential Guide development and evaluation of sourcing strategy, including guiding managers to shape job roles aligned to the future business strategy while balancing the impact of digitalisation and need for purposeful jobs for diverse talent groups 	 Al will be used to scan external and internal databases for potential candidates according to pre-defined criteria and coupled with data insights will facilitate evaluation of the sourcing efforts Knowledge of business strategy and job redesign will enable the shaping of future-focused roles to better serve business needs
 Build a network of senior industry contacts and a strong personal brand to attract senior candidates when the need arises 	 Develop strategies for building a network of leadership candidates for recruitment when required Engage proactively with potential talent for pipeline building of leadership positions 	 Data analytics will analyse strategic partnerships to identify their effectiveness in recruiting and training the right talent with the required skills Data analytics will provide insights to potential partnerships by analysing various metrics such as the effectiveness of programmes in training required skillsets, data on how successful candidates are, in meeting business needs Social media and programmatic job advertising will facilitate networking and pipeline building for leadership positions
Drive Selection and Securing of Candidates		
■ Task does not exist in current role	 [NEW] Design seamless candidate experience journeys aligned to the talent experience approach for diverse talent personas, by integrating technology 	 Relevant technologies will facilitate seamless candidate experiences such as ease of applications, real-time responses to candidate queries, personalised and on-demand interviews and assessments Multi-source listening and sentiment analysis will generate data and insights on the differentiated needs of diverse talent personas
 Prioritise hiring spending to invest in critical skills needed by the organisation 	 Proactively engage business leaders to identify future skills and prioritise hiring spending based on critical skills needed 	 Al-powered research will provide greater clarity into talent / capability demand and supply and pay trends in the industry
 Design a screening and assessment approach, using tools, techniques and technology solutions to assess candidates Recommend continuous improvement actions based on the monitoring of the assessment process 	 Design a differentiated screening and assessment framework for diverse talent personas, using various techniques and technologies Recommend continuous improvement actions based on assessment data, candidate feedback, and best practices 	 AI assessments, chatbots and increasingly powerful applicant tracking systems provide a range of available solutions to fine-tune the candidate experience Data analytics with facial analysis will assess candidates' behaviour and personas for job fit Gamification in recruitment will enable the assessment of the skills and attitudes of candidates Data analytics linking new hires' selection data / feedback and performance / engagement data will yield insights on effectiveness of the selection process
 Interview senior candidates and recommend qualified candidates to business leaders 	 Use data-driven insights gleaned from assessments to qualify and substantiate recommendation of senior candidates to business leaders 	 Data from structured screening and assessment processes will yield better insights into candidates' personalities, abilities and job / organisational fit
 Approach and secure senior candidates targeted for offers of employment 	 Secure identified senior candidates through personalised approaches that draw upon insights from assessment data 	Insights on candidates' personalities, abilities and job / organisational fit from assessment data will be used for personalisation of candidate approach strategies
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Appendix | a. Impact and Skills Analysis Willis Towers Watson III'IIII

Head, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Design Preboarding and Onboarding	
 Drive the development of onboarding processes for new joiners to facilitate their assimilation into the organisation 	 Formulate seamless preboarding and onboarding talent strategies for diverse groups of talents aligned to the talent experience approach and TVP [NEW] Develop a framework to evaluate preboarding and onboarding processes based on time-to-productivity, experience and other outcomes [NEW] Coach managers on ways to engage with new joiners to enhance talent experience such as constant engagement, establishing expectations, and providing initial support for assimilating into the organisation 	 Data analysis linking characteristics of the preboarding / onboarding process with time-to-productivity, turnover rate etc. will yield insights on effectiveness Multi-source listening and sentiment analysis will generate data and insights on the differentiated needs of diverse talent personas Al-based chatbots will serve as the main touch point with candidates to increase personalisation and seamless candidate experience Mobile applications with proactive nudging will remind managers to engage with new hires at appropriate times
 Monitor the employee engagement level of new joiners to identify key drivers of engagement 	 Develop appropriate interventions to enhance candidate as well as preboarding and onboarding experience based on the data-driven insights obtained through the analysis of employee engagement data 	 AI, multi-source listening and sentiment analysis will automate the continuous monitoring of employee engagement levels and generate insights on the preboarding and onboarding experience
 Monitor the turnover rate of new joiners to identify key reasons for leaving the organisation 	 [NEW] Develop an approach for predicting attrition and analysing key reasons for leaving the organisation [NEW] Guide the development of personalised retention strategies for high performers at risk of leaving 	 Machine learning algorithms will enable continuous monitoring of turnover rates and predictive modelling of attrition Multi-source listening and sentiment analysis will aid the development of personalised retention strategies

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Develop strategy for talent segmentation aligned to organisation's needs and guide the impact across talent solutions
Data-led Talent Acquisition	Strategise data-driven approach to talent sourcing by advocating the use of business and talent metrics to predict candidate success and effectiveness of sourcing channels. Drive global talent market and industry research and competitive intelligence research across a range of industries
Social Media and Talent Marketing Strategy	Strategise new media marketing approach as well as platforms and champion employer brand to resonate with diverse groups of talent. Define the expected outcomes and ensure use of optimal platforms to achieve the desired outcomes
Candidate Experience Design	Strategise organisation's candidate experience and define essential components of the candidate experience to guide the enhancement of the overall candidate assessment process
Technology-driven Talent Assessment Strategy	Strategise talent assessment approach to ensure seamless integration with technology solutions aligned with business needs and overall talent experience strategy
Talent Onboarding Experience Design	Strategise organisation's preboarding and onboarding experience for new hires, and define essential components of the preboarding and onboarding experience to guide design of integrated programmes and the enhancement of the overall experience for new joiners
Talent Value Proposition Design	Strategise the organisation's Talent Value Proposition (TVP), including employer branding, culture and rewards philosophy, and guide the development of relevant talent policies to deliver compelling and differentiated TVP for diverse talent groups
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences

Head, Talent Attraction

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will continue to focus on offering consultations to business leaders in the area of **talent resourcing solutions**, **proactive relationship building**, **and harnessing technology** to achieve better outcomes. Technologies such as **video interviews powered by AI** will see more usage with the ability to analyse speech, voice and micro-expressions to better assess candidates and ensure **enhanced candidate experience**. **Targetted advertising** may be used to track potential candidates and widen organisation's pool of potential talent. The role will **explore technologies such as blockchain** for improving the efficiency of background checks, further optimisation of high volume tasks in talent acquisition, and **augmented / virtual reality for preboarding and onboarding**. **Strategic manpower planning aided by predictive future capability requirements** and proactive recruitment instead of reactive hiring will become key.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'III

Manager, Talent Attraction

Job Family: **Talent Attraction**

Impact level: Medium



- The role will implement proactive talent attraction and retention strategies.
- Deliver Talent Value Proposition (TVP), including employer brand, culture and rewards to attract talent.
- Enhance candidate and onboarding experience and optimise process effectiveness.
- Social Media









Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
	Drive Data-driven HR Strategy and Resource Planning		
 Model the current workforce profile and project the demand and supply of future skills 	 Develop sourcing plans and budgets based on the business strategy, future skills requirements considering the broader talent ecosystem 	 Enterprise level workforce planning tools with analytics capabilities will enable predictive modelling of skills and facilitate budgeting 	
 Manage manpower costs within the approved budget 		 Advanced data analytics and predictive analytics will provide insights on talent and skills requirements for the future and linkage to business metrics 	
Analyse strategic workforce planning information such as skills requirements and advise business leaders on the range of	 Leverage competitive intelligence and market research to identify the supply gaps for various talent and capability groups 	 Al-powered research will provide greater clarity into talent and capability demand and supply trends in the industry 	
advise business leaders on the range of resource planning options	 Advise business leaders on innovative and / or technology-based talent resourcing solutions such as strategic partnerships, social media recruiting and plan the implementation of these solutions 	 Data analytics embedded within AI-based sourcing tools will allow more effective talent resourcing and planning through the tracking and analysis of applicants 	
Task does not exist in current role	 [NEW] Identify ideal candidate personas for the organisation based on talent market and industry research insights 	 Data analytics and AI will enable the segmentation of candidate personas for development of data-driven talent attraction programmes 	
	 [NEW] Develop data-driven talent attraction approach for differentiated talent attraction campaigns for future skills and diverse groups of talent 		
	Design Sourcing Strategy and Talent Value Propositio	n	
Task does not exist in current role	 [NEW] Perform competitive intelligence research and create candidate personas for targeted and strategic sourcing of critical talent 	 AI-powered research will provide greater clarity into talent / capability demand and supply trends in the industry 	
		 Data analytics and AI will enable the development of multiple personas to facilitate personalised candidate outreach 	
 Execute initiatives to deliver the employer branding strategy and incorporate employee value proposition (EVP) in all employee lifecycle activities 	 Support the development of employer brand and Talent Value Proposition (TVP) Identify platforms to communicate and embed TVP into organisational practices across the talent lifecycle 	 Communication channels such as corporate social media platforms and mobile applications will be used to communicate employer brand and TVP as well as enable continuous real-time feedback on the employer brand and TVP 	

Manager, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Recommend hiring standards, selection criteria and job requirements to fulfil the current and future business plans 	 Work with managers to shape job roles and requirements to align with current and future business strategies Develop sourcing strategies leveraging technology and innovative sourcing techniques for targeted sourcing of diverse groups of talent 	 Knowledge of business strategy and job redesign will enable the shaping of future-focused roles to better serve business needs Al will be used to scan external and internal databases for potential candidates according to pre-defined criteria Programmatic job advertising will help to maximise chances that job advertisements will be seen by candidates matching the desired profiles
 Maintain a database of potential recruits to allow proactive sourcing of qualified candidates 	 Network and proactively engage with potential talent to facilitate pipeline building and meet business needs 	 Data analytics will analyse strategic partnerships to identify their effectiveness in recruiting and training the right talent with the required skills AI will be used to scour external and internal databases for potential candidates according to pre-defined criteria Social media and programmatic job advertising will facilitate networking and pipeline building
Drive Selection and Securing of Candidates		
Task does not exist in current role	 [NEW] Implement seamless candidate experience journeys personalised for diverse candidate personas, using technology to enhance access in submitting applications, real-time responses to candidate queries, and personalised and on-demand interviews and assessments 	 Multi-source listening and sentiment analysis will generate data and insights on the differentiated needs of diverse talent personas Al powered chatbots will serve as the main touch point in the recruitment process to increase personalisation and seamlessness in candidate experience
 Recommend and deploy a range of assessment tools, techniques and technology solutions for hiring managers 	 Implement differentiated selection and assessment methods harnessing technology to assess candidates, while delivering a seamless candidate experience Suggest ways to continuously enhance the candidate experience based on feedback and best practices 	 Al assessments, chatbots, gamification, AR / VR and increasingly powerful applicant tracking systems provide a range of available solutions to fine-tune the candidate experience Data analytics with facial analysis will assess candidates' behaviour and personas for job fit Al powered chatbots will nudge candidates to provide feedback at various stages of the selection process
 Analyse information from the screening and assessment process to recommend suitable candidates for offers of employment 	 Substantiate recommendations on suitable candidates to hire using data-driven insights gleaned from the screening and assessment process Distil insights on the effectiveness of the selection process and suggest improvements to the selection process 	 Data-based insights from structured screening and assessment processes will yield evidence for candidates' personalities, abilities and job / organisational fit for various talent personas Data analytics linking new hires' selection data / feedback and performance / engagement data will yield insights on effectiveness of the selection process

Manager, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Design Preboarding and Onboarding	
 Design and deliver impactful onboarding programmes for new joiners to facilitate their assimilation into the organisation 	 Implement preboarding and onboarding processes through technology to deliver a seamless experience [NEW] Guide managers to engage with new joiners in ways that enhance talent experience for establishing expectations and providing initial support to assimilate into the organisation 	 Al chatbots will serve as the main touch point with candidates to increase personalisation and seamless candidate experience Mobile applications with proactive nudging will remind managers to engage with new hires at appropriate times
 Gather feedback from new joiners about their onboarding experience to identify areas for improvement 	 Gather feedback from new joiners and managers about the preboarding and onboarding experience to analyse effectiveness and recommend enhancements 	 Data analytics linking characteristics of the preboarding / onboarding process with time-to- productivity, turnover rate etc. will yield insights on effectiveness

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Approve the final talent personas based on the analysis and definition of talent segments to recommend implications on personalised talent solutions
Data-led Talent Acquisition	Lead data-driven talent acquisition and develop plans for global talent market and industry research. Develop plan for competitive intelligence research across a range of industries
Social Media and Talent Marketing Strategy	Design and plan new media marketing campaigns to promote employer brand across suitable platforms for diverse groups of talent. Monitor the metrics from the plans and campaigns and suggest changes to enhance outcomes
Candidate Experience Design	Plan implementation of technology across the candidate assessment process to ensure optimal candidate experience across various touchpoints
Technology-driven Talent Assessment Strategy	Identify relevant technology solutions and drive integration of these across the talent assessment processes, based on business and talent requirements to identify suitable talent
Talent Onboarding Experience Design	Plan implementation of technology across the onboarding and preboarding processes and introduce innovative approaches to enable holistic experience for new joiners
Talent Value Proposition Design	Design talent policies for diverse talent groups to enhance and reinforce the organisation's Talent Value Proposition (TVP) and uplift the appeal of the organisation as an employer of choice
Omni-channel Communication	Drive use of relevant communication touchpoints suitable for diverse groups of talent ensuring consistency of talent experiences across the platforms

Manager, Talent Attraction

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will continue to focus on implementing talent resourcing solutions aligned to business needs and proactively build relationships, including harnessing networks to develop a talent marketplace of various types of talent (increasingly non-employee talent) who may be activated based on the capabilities required by the business. The role will also continue to explore and incorporate emerging technologies to enhance efficiency and deliver a better candidate experience and reach diverse groups of talent. Technologies such as video interviews powered by AI will see more usage with the ability to analyse speech, voice and micro-expressions to better assess candidates. Augmented / virtual reality will be explored for use in preboarding and onboarding to deliver a more engaging experience for new joiners.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'III

Executive, Talent Attraction

Job Family: **Talent Attraction**

Impact level: Medium



- The role will promote **Talent Value Proposition (TVP)** through social media platforms.
- Synthesise talent market and industry research and business understanding to identify talent sources.
- Leverage AI & ML to enhance the candidate and onboarding experience and optimise talent acquisition processes.









Social Robotics

Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Promote Talent Value Proposition	
 Implement various outreach plans for different target talent pools 	 Develop and implement proactive initiatives such as strategic partnerships, online forums, and professional events that allow target talent pools to connect while building a positive employer brand 	 Communication and outreach platforms such as social media will be used to proactively build and promote a positive employer brand Strategic partnerships can be formed with institutes of higher learning to train and recruit talent with future skills
 Develop hiring collaterals based on organisation's Employee Value Proposition 	 [NEW] Guide hiring managers to present a positive Talent Value Proposition (TVP) throughout the recruitment process 	 Mobile applications and cloud technology will enable real-time communication between stakeholders and allow for more seamless transitions in the recruiting process such as real-time nudges to managers to engage with prospective hires
	Analyse Talent Sources and Channels	
 Determine implications of the organisation's current and future needs on hiring requirements 	 Identify talent sources based on current and future business needs, budgets and consideration of diverse talent groups to support hiring decisions Source for passive candidates proactively through various channels and facilitate the hiring process by being the point of contact 	 Enterprise level workforce planning tools with analytics capabilities will enable predictive modelling of skills
 Identify opportunities to attract and convert potential candidates into new hires 	Identify opportunities to deploy innovative and / or technology-based approaches in sourcing and proactively reach out to convert potential candidates into new hires	 Social media and partnerships with institutes of higher learning will provide access to a variety of talent pools
 Propose improvements to the sourcing process 	 Assess effectiveness of various sources and approaches and propose improvements to the sourcing process 	 Data analytics of talent sourcing metrics will be used to monitor effectiveness

Executive, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
Deliver Positive and Seamless Candidate Experience		
 Implement SOPs for selection, assessment and hiring 	 [NEW] Suggest innovative and technology-based selection, assessment and hiring approaches that enhance candidate experience and reduce hiring bias 	 Al will automate the liaising / administering of the various components of assessment process
	 Implement the new approaches and technology for selection, assessment and hiring 	Research on the fast-growing range of recruitment solutions
		 Understanding of candidate experience design and change management techniques to facilitate implementation
 Shortlist candidates and facilitate the hiring process 	Task substituted by technology	 Automated sourcing via AI and machine learning for resume screening will be used for shortlisting of candidates with greater efficiency and consistency
 Conduct background and reference checks 	 [NEW] Explore new technologies such as blockchain that can facilitate / substitute background and reference checks 	 Talent attraction systems will be programmed to provide automatic reminders for background and reference checks at appropriate timings e.g. blockchain technology can be a secure mode for storage of sensitive data transactions
Communicate offers and negotiate terms and conditions, responding to full range of queries	 Communicate offers and negotiate terms and conditions, responding to complex queries from the candidates 	 Al powered chatbots will be used to handle routine and simplistic queries on contractual issues
from candidates	 [NEW] Maintain and update the range of queries and responses that chatbots can handle to enhance first-level query handling from candidates 	
Task does not exist in current role	[NEW] Monitor effectiveness and feedback from candidates and the business to enhance the recruitment process	 Data analytics will be used to track effectiveness metrics throughout the recruitment process and analyse feedback
Task does not exist in current role	 [NEW] Support the delivery of a seamless and engaging candidate experience and serve as a candidate relationship manager to 	 Understanding of candidate experience design will enhance the delivery of the candidate experience and provide better support to potential hires
	potential hires	 Mobile applications with proactive nudging will provide reminders to engage with promising candidates at appropriate times
Support Impactful Onboarding for New Hires		
 Advise on administrative issues and documentation required for new hires 	 [NEW] Suggest onboarding best practices to incorporate into the onboarding process to enhance overall experience 	Al powered chatbots will automate the resolution of standard administrative enquires
 Develop onboarding materials and programmes for new hires 	 [NEW] Analyse new technology and practices to provide suggestions on technology and relevant materials to enhance new hire experience 	 Knowledge of best practices and emerging technologies that enhance new hire experience will be applied in conjunction with the organisational context
Tot flew filles	relevant materials to emiance new fine expenence	 Mobile applications with proactive nudging will provide reminders to engage with new hires at appropriate times

Executive, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Analyse data and feedback on the quality of onboarding experience 	 Suggest improvements to the onboarding process by incorporating real-time insights from multi-sourced feedback 	 Multi-source listening and sentiment analysis will generate real-time data and insights on new hires' onboarding experience
	 [NEW] Analyse onboarding experiences against various milestones to identify insights for the development of a more consistent and structured onboarding process that reflects a successful onboarding programme 	 Data analytics can provide analysis of candidate experience against talent onboarding milestones to understand correlation for the enhancement of onboarding programme

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Analyse data and develop segments of talent groups and define the distinct talent personas to help facilitate the development and implementation of personalised talent solutions
Data-led Talent Acquisition	Leverage global talent market and industry research and competitive intelligence research across a range of industries to implement the data-led talent acquisition
Social Media and Talent Marketing Strategy	Manage new media marketing campaigns and provide inputs for initiatives to attract qualified talent and promote available positions within the organisation
Candidate Experience Design	Identify areas of improvement in sourcing, assessment and securing of candidates and suggest technologies to deliver a positive candidate experience
Technology-driven Talent Assessment Strategy	Provide inputs for relevant technology solutions to automate and support the enhancement of talent assessment processes
Talent Onboarding Experience Design	Identify improvement opportunities to onboarding programmes and suggest technologies to enhance the delivery for a seamless and positive onboarding experience
Talent Value Proposition Design	Implement talent policies for diverse talent groups and suggest enhancements to support the building of an appealing Talent Value Proposition (TVP)
Omni-channel Communication	Identify the relevant communication touchpoints for diverse groups of talent and review communications to ensure consistency of talent experience across platforms

Executive, Talent Attraction

Future skills* for all HR executives

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

The role will lead the execution of **new and innovative technology-enabled processes in talent sourcing and assessment** that will be connected to an integrated system for talent data. The role will lead **continuous improvement of talent onboarding processes** and provide input for design of talent onboarding programmes. There will be an **emphasis on social recruiting** and the role will be expected to build credibility and visibility in the talent market and emerge as a trusted partner to qualified talents.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'III

Associate, Talent Attraction

Job Family: **Talent Attraction**

Impact level: High



- The role will create consistent messages on Talent Value Proposition (TVP) for social media platforms.
- Analyse data from talent market and industry research as well as future business needs to derive insights on talent pools.
- Support execution of proactive talent attraction initiatives.
- Address complex queries from new hires throughout preboarding and onboarding process.













Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS		NEW APPROACHES TO TASKS
Promote Talent Value Proposition			
 Execute outreach initiatives for different target talent pools 	 [NEW] Share insights on effectiveness of outreach channels by analysing employer brand visibility Proactively engage talent through relevant activities and initiatives and promote employer brand 		hannels with data analytics will provide information on activity rates es such as social media will be used to proactively build and promote a positive brand
 Support the development of hiring collaterals based on the organisation's Employee Value Proposition 	 Support the development of content for the broader talent ecosystem ensuring consistent messaging throughout recruitment process to promote the Talent Value Proposition 		lications, social media and communication platforms technology will enable real-time and communication of TVP
	Analyse Talent Sources and Cha	nnels	
 Conduct research on sourcing approaches and tools for recruitment purposes Measure conversion success rate for the various sourcing channels 	 [NEW] Analyse current and future business needs and execute differentiated sourcing approaches using appropriate tools for diverse talent groups 	of skills	evel workforce planning tools with analytics capabilities will enable predictive modelling cing metrics will be used to monitor effectiveness of talent sources
 Identify potential employees from different talent pools and outreach channels 	 [NEW] Build a pipeline of potential candidates by engaging with talent communities and those at high risk of attrition 	pre-defined	sed to scour external and internal databases for potential candidates according to criteria arning algorithms will enable continuous monitoring of turnover rates and predictive modelling
Task does not exist in current role	 [NEW] Execute process improvement initiatives for existing talent sourcing process by incorporating insights from data analysis 	 Data analyt 	ics of talent sourcing metrics will be used to monitor effectiveness

Associate, Talent Attraction

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Deliver Positive and Seamless Candidate Experience	
 Follow SOPs and regulations for the administering of selection and assessment activities Respond to routine queries from candidates 	Task substituted by technology	 Al will automate screening of resumes for shortlisting as well as the liaising / administering components of the assessment process Al powered chatbots will serve as the main touch point with candidates to increase personalisation and seamless candidate experience
 Support background and reference checks Prepare and provide contracts in accordance to negotiated terms and conditions 	 Support background and reference checks using technologies such as talent attraction systems Prepare and provide contracts accordingly and address complex queries regarding the terms and conditions 	 Talent attraction systems will be programmed to provide automatic reminders for background and reference checks at appropriate timings e.g. blockchain technology can be a secure mode for storage of sensitive data transactions Routine and simplistic queries could be handled by AI and chatbots while HR professionals focus on complex issues
	Support Impactful Onboarding for New Hires	
 Respond to basic administrative queries from new hires 	Task substituted by technology	Al powered chatbots will automate the resolution of standard administrative enquires
 Support the development of onboarding materials and programmes for new hires 	 Support the development of personalised onboarding materials and programmes tailored to new hires preferences [NEW] Research new technology and market practices to enhance onboarding experience 	 Data analytics will provide insights to preferences for the development of personalised materials and programmes Knowledge of emerging technologies on onboarding and related best practices will be applied in conjunction with the organisational context
 Collect feedback on the quality of onboarding experience 	 [NEW] Derive data-driven insights from multi-sourced feedback for onboarding experience to support improvement of onboarding programmes 	 Multi-source listening and sentiment analysis will generate data and insights on new hires' onboarding experience

Future skills* (Role-specific)

Focus areas	Descriptions	
Talent Persona Creation	Support the initial analysis of talent groups for talent segmentation and identify distinct characteristics to help define the talent personas	
Data-led Talent Acquisition	Conduct research on global talent market and industry research as well as competitive intelligence research across a range of industries to support data-driven talent acquisition processes	
Social Media and Talent Marketing Strategy	Create impactful branding messages and coordinate with relevant stakeholders to support new media marketing campaigns	
Candidate Experience Design	Analyse feedback on candidate experience and research possible technologies to provide inputs on the potential change on the various parts of the candidate assessment	
Technology-driven Talent Assessment Strategy	Research on available technology and identify their pros and cons for assessment of diverse talent groups	
Talent Onboarding Experience Design	Analyse feedback on onboarding delivery and research possible technologies to provide inputs on the potential change on the various parts of the talent onboarding journey	
Talent Value Proposition Design	Support the implementation of talent policies across diverse talent groups and contribute to the development of the organisation's Talent Value Proposition (TVP)	
Omni-channel Communication	Research on relevant communication touchpoints and develop communications for consistent experience through various communication touchpoints for diverse groups of talent	

Associate, Talent Attraction

Future skills* for all HR associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Support talent initiatives by applying knowledge of business and basic financial indicators as well as workforce analytics
Data-driven Story Telling	Develop initial data-based findings and visualisations to support a clear and logical narrative
People Analytics	Conduct initial analysis of talent and business metrics, including intangible metrics, and support the development of predictive models to derive meaningful insights
Organisational Behaviour and Change Management	Support change management initiatives and communications to talent by guiding them on use of technology for real-time multidirectional engagement and helping to answer any specific queries regarding the change initiatives
Agile Mindset	Research on agile ways of working, structures and processes and provide inputs on ways of enhancing adaptability and collaboration within the organisation
HR Technology Adoption	Research the HR technology landscape to identify potential technologies to enhance the talent lifecycle
Relationships and Communication	Identify own emotional patterns and communication style to effectively work and communicate with stakeholders and support the execution of communication plans for relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Support implementation and continuous feedback collection for workforce policies across diverse talent groups through technology tools and platforms

Beyond three years

The role will execute new and innovative technology-enabled processes in talent sourcing and assessment that will be connected to an integrated platform for talent data. The role will also support the design and implementation of preboarding and onboarding processes through continuous improvement. The role will support the development of good relationships with qualified talents to enhance the organisation's talent pipeline.

Appendix | a. Impact and Skills Analysis WillisTowersWatson III'I'III

Head, Employee Experience and Relations

Job Family: **Employee Experience and Relations**

Impact level: Medium



- The role will develop talent experience and talent relations strategies for the organisation.
- Shape a high performing and inclusive culture and coach business leaders to deliver the talent experience.
- Leverage data-driven insights to review effectiveness and recommend ways to improve talent experience programmes to deliver the impact on business outcomes.











Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
	Enhancing Talent Experience		
 Develop a strategy and approach to enhance employee engagement 	 [NEW] Partner with other HR leaders as well as business leaders to design talent journeys for multiple personas aligned to the Talent Value Proposition (TVP) 	 Data analytics and AI will be used to facilitate segmentation of talent and definition of personas 	
	 Develop a strategy and approach to enhance talent experience across the talent lifecycle for diverse talent groups 	 Multi-source listening and sentiment analysis by obtaining feedback and data from diverse range of stakeholders as well as internal and external platforms will generate insights on the needs of diverse talent groups 	
 Drive implementation of employee engagement programmes and related communications 	 Drive implementation of talent experience programmes and continuous listening approach as well as related communications 	 Social Media, mobile applications and technology platforms will enable the delivery of talent experience and continuous listening initiatives 	
 Coach senior leaders on ways to champion employee engagement programmes 	Coach senior leaders on ways to champion talent experience programmes	 Social media and mobile applications with proactive nudging will deliver personalised communications while collecting real-time data on sentiments 	
		Al-powered chatbots will serve as a first-level support to handle basic queries	
Review effectiveness of employee engagement programmes and recommend	 [NEW] Design framework to measure effectiveness of talent experience programmes and linkage to business outcomes 	 Feedback and data on talent experience will be examined in conjunction with data on individual / organisational performance and attrition 	
areas of improvements	 Use data-driven insights to review the effectiveness of talent experience programmes and impact on the business outcomes; and recommend enhancements to the programmes 		
	Managing Talent and Labour Relations		
 Develop labour strategies that foster constructive working relationships with parties such as trade unions and work councils 	 Develop labour relations strategies by leveraging data insights to foster constructive working relationships with relevant parties such as trade unions, trade associations, and policy makers [NEW] Pre-empt workforce management risks and challenges related to the broader talent ecosystem 	 Automated web programming will enable monitoring of talent sentiments and data across internal and external platforms to provide insights and alerts on workplace safety issues such as sexual harassment as well as talent behaviour risks to proactively mitigate them and enhance relations 	

Head, Employee Experience and Relations

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Engage in key negotiations with relevant parties on labour-related issues to achieve desired outcomes for all stakeholders 	Lead joint discussions with labour unions and other involved parties by leveraging real-time information, to achieve desired outcomes for all stakeholders	 Knowledge of collective bargaining changes due to intelligent automation impacting talent will enable better dialogues with relevant parties such as trade unions to ensure successful implementation of the technologies Communication platforms such as social media and mobile applications will allow real-time information sharing with relevant stakeholders
	Managing Culture, Diversity and Inclusion	
Task does not exist in current role	■ [NEW] Drive alignment of culture with organisational values and the TVP	 Multi-source listening and sentiment analysis along with application natural language processing on data from diverse range of stakeholders as well as internal and external platforms will be used to monitor alignment between the current and desired state
 Foster a high performing culture while advocating for diversity and inclusion (D&I) by periodically measuring culture through pulse surveys 	 Develop culture building initiatives by leveraging real-time data and insights to foster a high performing culture that embraces D&I [NEW] Coach senior leaders to be role models for the desired culture and embrace D&I in talent interactions and work processes 	 Application of natural language processing on the data obtained from real-time feedback and sentiment analysis coupled with data analytics will enable monitoring and measuring of the impact of efforts designed to improve D&I outcomes Data analytics will enable the analysis of possible inherent biases in talent decision making as well as potential phrasing of policies and initiatives that could be exclusionary or biased to diagnose D&I gaps and design of interventions Communication platforms such as social media and mobile applications with proactive nudging will be used to promote culture change
 Identify opportunities to raise the corporate branding around D&I 	 Raise the corporate branding around D&I continuously to enhance corporate culture by leveraging feedback and workforce metrics data to obtain data-driven insights across the entire D&I space 	 Application of natural language processing on the data obtained from real-time feedback and sentiment analysis coupled with data analytics will provide D&I insights on current practices such as workforce characteristics based on race, age, and gender

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Develop strategy for talent segmentation aligned to organisation's needs and guide the impact across talent solutions
Talent Journey Mapping	Guide the development of talent journey across the talent lifecycle for diverse groups of talent. Drive use of innovative technologies to deliver the talent experience
Design Thinking	Build and integrate culture that encourages human-centred strategies for development of programmes which lead to enhanced talent experience
Continuous Listening Strategy	Design continuous listening strategies and determine technology to capture real-time feedback and evaluate effectiveness of talent experience programmes to develop enhancement
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences
Cross Cultural and Diversity Sensitivity	Develop strategies to promote awareness of cultural and diversity differences to foster a work environment that cultivates a high performing and enabling culture for all talent

Head, Employee Experience and Relations

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will continue to have a key focus on partnering with HR and business leaders to spearhead talent experience strategies and approaches to improve workforce productivity, organisation reputation and talent relations. There will be a focus on building a unique workplace culture that is reflective of the organisation's brand. Technologies such as natural language processing and biometrics will be extensively used to generate in-depth insights on talent sentiments. This would enable the development of talent-focused HR solutions that effectively meet needs and deliver consumer-grade experiences. Data-based measures of talent experience linked to return of investment will be increasingly used to convince business leaders of the value of investment in this area.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Manager, Employee Experience and Relations

Job Family: **Employee Experience and Relations**

Impact level: Medium



- The role will lead the implementation of talent journeys to optimise talent experience across touchpoints in the talent lifecycle.
- Collaborate with the business to manage talent relations and culture to motivate and integrate diverse groups of talent.
- Use technology to facilitate continuous engagement, enhance experience, and generate real-time feedback and insights.
- Social Media









Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Enhancing Talent Experience	
 Provide support to business leaders to implement employee engagement activities and oversee communication of their progress 	 [NEW] Partner with business to synthesise business requirements and insights from talent data to define talent personas [NEW] Develop talent journeys and lead implementation of related talent experience and communication initiatives across the talent lifecycle for diverse personas 	 Data analytics and AI will be used to facilitate segmentation of talent for definition of personas Multi-source listening and sentiment analysis by obtaining feedback and data from diverse range of stakeholders as well as internal and external platforms will generate insights on the needs of diverse talent groups
 Derive insights from employee engagement data and recommend improvement actions 	 Develop talent experience programmes and continuous listening approach [NEW] Recommend appropriate technologies to measure tangible and intangible elements of talent experience Recommend improvement actions based on the insights from talent experience data 	 Social media and mobile applications will enable collection of real-time data on talent sentiments Sentiment analysis will generate insights on the sentiments of diverse talent groups to enable data-driven decision making on initiatives to improve talent experience
 Engage business leaders in action planning discussions to implement improvement actions 	 Engage business leaders in action planning discussions to implement improvement actions based on data and insights [NEW] Coach managers to deliver optimal talent experiences drawing upon real-time feedback and sentiments gathered from their subordinates 	 Use of mobile applications and pulse survey tools embedded within technology applications enable constant engagement with talent, providing real-time feedback, sentiments, and data. Coupled with data analysis and AI, this can provide HR and managers curated recommendations
Task does not exist in current role	 [NEW] Guide and coach business leaders and managers on the use of self-service data and analytics to improve talent experience 	 Platforms equipped with data analytics and AI / ML will enable self-service of personalised insights such as motivating factors, sense of belonging, and talent sentiments
■ Task does not exist in current role	 [NEW] Develop data-driven insights by assessing the impact of talent experience programmes on business outcomes to report effectiveness and recommend improvements 	 Feedback and data on talent experience programmes will be analysed against business metrics to identify insights on correlation and provide recommendations to enhance effectiveness of the talent experience programmes

Manager, Employee Experience and Relations

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Managing Talent and Labour Relations	
 Identify and synthesise relevant information required to support union and employee negotiations 	 Identify and synthesise relevant information required to support union and talent negotiations [NEW] Derive insights on workforce risks and challenges by harnessing data analytics on talent experience and sentiments and recommend solutions to support the organisation's position and interest 	 Multi-source listening by obtaining real-time feedback and data on sentiments and experience from diverse range of sources such as business leaders, talent as well as internal platforms and sentiment analysis will generate insights on the needs of diverse talent groups Automated web programming will enable constant monitoring of talent across internal and external platforms to provide alerts on areas of risk, stress, and fraud
 Outline the business impact and risks in connection with labour relations to support union and employee negotiations and recommend ways to mitigate them 	 Outline the business impact and risks in connection with more complex labour relations with a larger ecosystem of relevant parties such as trade unions, trade associations, and policy makers and recommend ways to mitigate them Maintain continuous channels of communication with labour unions and talent to better understand needs and manage expectations 	 Al and Machine Learning powered web programming will enable real-time updates on labour policies to obtain insights on impact to business Knowledge of collective bargaining changes due to intelligent automation impacting talent will enable better dialogues with relevant parties such as trade unions to ensure successful implementation of the technologies Communication platforms such as social media and mobile applications will allow continuous engagement with real-time information sharing with relevant stakeholders
	Managing Culture, Diversity and Inclusion	
 Incorporate Diversity and Inclusion (D&I) principles into HR policies and translate the policies into day-to-day practices at workplace 	 Incorporate D&I principles into HR policies and engage line managers and other HR functions to translate policies into day-to-day practices to better integrate diverse talent groups 	 Data analytics and sentiment analysis of data gathered from multi-source listening will help to generate insights
 Plan and execute culture building activities to foster a high performing culture that embraces D&I 	 Plan and execute culture building activities by leveraging technology to measure impact of D&I initiatives, highlight possible inherent biases, and scan internal platforms, to foster a high performing culture that embraces D&I 	 Data analytics will enable the analysis of possible inherent biases in talent decision making as well as potential phrasing of policies and initiatives that could be exclusionary or biased, to diagnose D&I gaps and design of interventions Communication platforms such as social media and mobile applications with proactive nudging will be used to promote culture change
Task does not exist in current role	 [NEW] Develop feedback channels to proactively gather inputs around culture and D&I practices 	 Social media, chatbots and mobile applications with proactive nudging will be used to gather feedback
 Contribute towards building the corporate branding for D&I in all communications with stakeholders 	 Contribute towards building the corporate branding for D&I in all communications with stakeholders [NEW] Analyse feedback and workforce metrics to share impact of D&I programmes and initiatives on corporate culture 	 Data analytics and sentiment analysis of data gathered from multi-source listening will help to generate insights Enterprise level workforce planning tools with analytics capabilities will provide data on workforce characteristics

Manager, Employee Experience and Relations

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Talent Persona Creation	Approve the final talent personas based on the analysis and definition of talent segments to recommend implications on personalised talent solutions
Talent Journey Mapping	Map the talent journey across the lifecycle for diverse talent groups, considering business and talent needs, and recommend technologies to enhance talent experience
Design Thinking	Recommend innovative techniques and technologies to develop human-centred processes and programmes, and drive experimentation considering talent needs to enhance talent experience
Continuous Listening Strategy	Implement continuous listening strategy and recommend technologies to capture real-time and continuous feedback. Guide the analysis needed to enhance talent experience
Omni-channel Communication	Drive use of relevant communication touchpoints suitable for diverse groups of talent ensuring consistency of talent experiences across the platforms
Cross Cultural and Diversity Sensitivity	Implement programmes to build awareness of cultural and diversity differences to enable the creation of a high performing culture that supports diversity and inclusion for all talent

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will continue to focus on **driving implementation of talent journeys** customised to diverse talent personas. **Experimenting** with different approaches and continuously **fine tuning new and existing practices** in a **data-driven** manner will be expected. Technologies such as natural language processing and biometrics will be extensively used to enable **generation of in-depth insights** to provide a **personalised and consumer-grade experience** across the entire talent lifecycle. There will be expectation for stronger integration of technology into HR programmes to enable seamless talent experiences and to **empower talent to manage their own experiences**.

Appendix | a. Impact and Skills Analysis WillisTowersWatson III'I'III

Executive, Employee Experience and Relations

Job Family: **Employee Experience and Relations**

Impact level: High



- The role will implement innovative talent experience programmes to motivate and integrate a diverse workforce.
- Monitor and handle workplace issues and talent relations to enhance overall talent experience.
- Analyse real-time feedback gathered through continuous engagement tools and provide recommendations to develop talent-centric solutions.











Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Enhancing Talent Experience and Wellness	
 Develop items for employee engagement surveys 	 Analyse business needs and different talent personas to support the development of talent experience initiatives 	 Data analytics and AI will be used to facilitate segmentation of talent for definition of personas
	 [NEW] Research technological solutions that can be used to implement talent experience initiatives and gather data on talent sentiments 	 Mobile applications and other technology platforms will enable the delivery of talent experience initiatives
		 Multi-source listening and sentiment analysis by obtaining feedback and data from diverse range of stakeholders as well as internal and external platforms will generate insights on the needs of diverse talent groups
 Implement programmes to improve employee engagement and well-being 	 Implement programmes to improve talent experience and wellness for diverse groups of talent across the broader talent ecosystem 	 Social media and mobile applications with proactive nudging will deliver personalised communications on talent experience programmes
 Analyse employee engagement data to identify insights and propose possible enhancements to the programmes 	 Analyse data on talent experience gathered from sources such as pulse surveys, to generate insights and identify areas for improvement [NEW] Research for new technologies to measure tangibles such as pay and benefits and intangibles such as telecommuting, recognition, and work-life balance to enhance the talent experience 	 Social media and mobile applications will enable collection of real-time data on talent sentiments across the broader talent ecosystem and combined with data analysis will generate insights on areas for improvement to support data-driven decision making
Task does not exist in current role	 [NEW] Aid the business and line managers to use self-service data and analytics to obtain insights on talent experience 	 Platforms equipped with data analytics and AI / ML will enable self-service use of personalised insights such as motivating factors, retention and engagement suggestions
 Conduct internal studies on the organisation's workplace ergonomics to introduce a standardised one-size fit all policy 	 Conduct internal studies on the organisation's workplace ergonomics for diverse groups of talent 	Multi-source listening by obtaining feedback and data on experience and needs from diverse range of sources such as business leaders and talent, combined with data analysis will generate insights to support implementation of workplace wellness initiatives.
	• Introduce innovative workplace wellness initiatives such as standing desks, sessions on mental health, etc. to enhance talent experience across the talent lifecycle	analysis will generate insights to support implementation of workplace wellness initiatives for diverse groups of talent

Executive, Employee Experience and Relations

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Supporting Talent Relations	
 Communicate employee relations policies through organisation's internal channels 	 Communicate talent relations policies to the broader talent ecosystem through appropriate channels [NEW] Maintain continuous engagement with the broader talent ecosystem by leveraging technology for the communication and implementation of workplace programmes and policies 	 Mobile applications with chatbots will provide a convenient platform for talent to access policies, lodge reports, and provide feedback on their experience
 Categorise grievances reported according to guidelines 	 Task substituted by technology 	 RPA, AI and Machine Learning technologies will provide first level support with human intervention only when necessary
 Provide support to managers in investigating non-routine grievance matters 	 Harness data-driven insights when providing support to managers in investigating non- routine grievance and workplace matters 	 Multi-source listening by obtaining feedback and data on grievance and workplace matters from diverse range of sources and data analytics will provide insights for a more holistic understanding to enhance the investigation and resolution
 Analyse feedback on effectiveness of and satisfaction with grievance resolution to suggest improvements 	 Analyse feedback on effectiveness of and satisfaction with grievance resolution by leveraging data analytics to suggest data-driven improvements 	 Data analytics and sentiment analysis of feedback gathered on grievance resolution will facilitate generation of insights for improvements on grievance process
Task does not exist in current role	[NEW] Implement programmes to manage workforce risks and challenges for diverse groups of talent	 Multi-source listening by obtaining real-time feedback and data on sentiments and experience from diverse range of sources combined with sentiment analysis will generate insights on the needs of diverse talent personas

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Analyse data and develop segments of talent groups and define the distinct talent personas to help facilitate the development and implementation of personalised talent solutions
Talent Journey Mapping	Identify key moments across the talent lifecycle, synthesise insights on the gaps in talent experience to provide recommendations for enhancement
Design Thinking	Research new ideas taking into consideration talent needs and help to develop new human-centred initiatives that can be quickly tested and implemented to enhance talent experience
Continuous Listening Strategy	Analyse real-time data and continuous feedback obtained from continuous listening initiatives and technology tools, and provide recommendations for targeted actions to enhance talent experience
Omni-channel Communication	Identify the relevant communication touchpoints for diverse groups of talent and review communications to ensure consistency of talent experience across platforms

Executive, Employee Experience and Relations

Future skills* for all HR executives

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

The role will continue to **implement talent experience initiatives** that are customised to diverse talent personas to **enhance talent experience and wellness**. The role will have an increased focus on experimentation to **facilitate incorporation of technology into work processes** to enhance effectiveness and efficiency. The role will also facilitate the **introduction of new technologies** such as biometrics, natural language processing and wearables to facilitate a more in-depth understanding of talent experiences throughout the talent lifecycle.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'III

Associate, Employee Experience and Relations

Job Family: **Employee Experience and Relations**

Impact level: High



- The role will support the delivery of talent experience programmes and initiatives to motivate and integrate a diverse workforce.
- Support management of workplace issues to enhance overall talent experience.
- Identify insights on talent experience through analysis of real-time feedback from continuous engagement tools.
- Social Media









Artificial Intelligence (AI) & Machine Learning (ML)

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Enhancing Talent Experience and Wellness	
 Support execution of employee engagement and well-being programmes 	 Administer talent experience and wellness initiatives for diverse groups of talent across the broader talent ecosystem 	 Social media, chatbots and mobile applications with proactive nudging will be used for communication of programmes
 Administer employee engagement surveys 	 Utilise technologies to implement talent experience initiatives and gather data on talent sentiments from sources such as pulse surveys, emails and other social media platforms 	 Social media and mobile applications will enable real-time collection of data on talent experiences and sentiments
 Collate responses from employee engagement surveys 	Task substituted by technology	Online survey platforms will allow automated collation of survey responses
 Collate feedback on the effectiveness of employee engagement and well-being programmes 	 Implement feedback channels to proactively gather inputs on talent experience and wellness programmes 	 Social media and mobile applications will enable collection of real-time data on talent sentiments across the broader talent ecosystem RPA and chatbots will enable feedback to be solicited during and after programmes for measuring effectiveness
Task does not exist in current role	 [NEW] Analyse data on talent experience to generate insights on challenges and issues faced by diverse groups of talent 	 Data analytics and sentiment analysis of data gathered from multi-source listening will be used to generate insights
 Gather research and data on the organisation's workplace ergonomics to support standardisation of a one-size fit all policy 	 Gather research and data on the organisation's workplace ergonomics for diverse groups of talent [NEW] Research on innovative workplace wellness practices to support development of initiatives that meet the needs of diverse talents groups 	 Multi-source listening and sentiment analysis by obtaining feedback and data from diverse range of stakeholders as well as internal and external platforms, combined with data analysis will generate insights to support implementation of workplace wellness practices for diverse groups of talent
Supporting Talent Relations		
 Draft communications messages to employees on the employee relations policies 	 Draft bite-sized and fit-for-purpose communications on workplace programmes and policies for diverse groups of talent [NEW] Research and identify relevant platforms and technologies for supporting the continuous communication and implementation of workplace programmes and policies 	 Communication platforms such as mobile applications will allow transmission of bite-sized communications customised to diverse talent groups

Associate, Employee Experience and Relations

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Document reported employee issues and address routine issues according to guidelines 	Task substituted by technology	 Al-powered chatbots will facilitate first level support and resolution of routine queries as per defined guidelines
 Collate feedback on effectiveness of issue resolutions 	 Collate and analyse feedback on effectiveness of issue resolutions 	 Data analytics of feedback gathered on issue resolution will facilitate generation of insights for improvements on resolution process

Future skills* (Role-specific)

Focus areas	Descriptions
Talent Persona Creation	Support the initial analysis of talent groups for talent segmentation and identify distinct characteristics to help define the talent personas
Talent Journey Mapping	Analyse data across the various touchpoints in the talent journey and identify gaps in the talent experience
Design Thinking	Identify potential opportunities to enhance talent experience based on understanding of talent needs and support development of new human-centred ideas and approaches
Continuous Listening Strategy	Use continuous listening initiatives and technology tools to obtain real-time and continuous feedback and provide inputs to enhance talent experience
Omni-channel Communication	Research on relevant communication touchpoints and develop communications for consistent experience through various communication touchpoints for diverse groups of talent

Associate, Employee Experience and Relations

Future skills* for all HR associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Support talent initiatives by applying knowledge of business and basic financial indicators as well as workforce analytics
Data-driven Story Telling	Develop initial data-based findings and visualisations to support a clear and logical narrative
People Analytics	Conduct initial analysis of talent and business metrics, including intangible metrics, and support the development of predictive models to derive meaningful insights
Organisational Behaviour and Change Management	Support change management initiatives and communications to talent by guiding them on use of technology for real-time multidirectional engagement and helping to answer any specific queries regarding the change initiatives
Agile Mindset	Research on agile ways of working, structures and processes and provide inputs on ways of enhancing adaptability and collaboration within the organisation
HR Technology Adoption	Research the HR technology landscape to identify potential technologies to enhance the talent lifecycle
Relationships and Communication	Identify own emotional patterns and communication style to effectively work and communicate with stakeholders and support the execution of communication plans for relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Support implementation and continuous feedback collection for workforce policies across diverse talent groups through technology tools and platforms

Beyond three years

The role will continue to support the **implementation of talent experience initiatives** customised to diverse talent personas to **enhance talent experience and wellness**. The role will support the **exploration of possible technologies and practices** to meet organisation, business and talent needs. The role will also **identify areas of improvement for talent experience delivery** through real-time in-depth analysis of feedback gathered through new technologies such as biometrics, natural language processing and wearables.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Head, Talent Management

Job Family:

Talent Management

Impact level: Low



- This role will focus on establishing a talent management strategy for diverse groups of talent through objective and holistic assessment of talent capabilities and future business needs.
- Link talent management programmes to business outcomes and adopt a **consultative approach** to obtain **buy-in from the business** for **implementation** of programmes.
- Facilitate a skills-based approach that focuses on skill development to enable career progression pathways that are personalised, self-directed and aligned with the business requirements.
- Enable delivery of personalised talent management programmes through technologies such as Mobile Applications and AI.
- Be a change advocate to drive the organisation towards a talent-centric culture.





Artificial Intelligence (AI) & Machine Learning (ML)



Mobile Applications



EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Designing Total Talent Management Framework	
 Develop a talent management framework to identify talent profiles, develop and retain the right talent to meet organisation needs 	 Define total talent management strategy tailored to diverse groups of talent and the future capabilities required in the organisation Drive development and implementation of talent management programmes that are flexible, personalised and facilitate self-directed development 	 Data analytics to understand the talent preferences and aspirations, as well as knowledge of Talent Value Proposition (TVP) will be key for developing tailored talent management frameworks for diverse groups of talent Communication platforms such as mobile applications and social media coupled with proactive nudging will enable delivery of self-directed and personalised talent management
 Coach business leaders to mentor talent and support them by monitoring engagement levels and implementing efforts to retain talent 	 Coach business leaders to deliver personalised talent management programmes that enhance talent engagement and experience 	 Al and analytics embedded in the technology solutions will provide real-time collection of data on talent management programmes and sentiment analysis In-depth knowledge of business needs to align talent aspirations to increase synergy for better job fit
Task does not exist in current role	 [NEW] Establish a business case for talent management programmes using data-driven frameworks to predict their effectiveness and ROI against performance indicators 	 Data analytics and predictive modelling of talent management metrics linked to business performance indicators, will enable programme effectiveness measurements as well as provide insights on areas of improvement

Head, Talent Management

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
	Designing Career Journeys		
 Establish organisation-wide career management frameworks, policies and programmes as a component of Employee Value Proposition 	 Develop skill-based career progression pathways to enable personalised career journeys for diverse groups of talent Drive implementation of relevant technologies to enable self-directed career journeys 	 Data analytics and AI will analyse historical and market data as well as talent-related data to provide real-time recommendations on skills and career progression pathways Predictive analytics through AI will generate suggestions on the most appropriate career progression based on the talent's skills and profile Communication platforms such as mobile applications and social media coupled with proactive nudging will enable delivery of self-directed career journeys 	
 Influence senior managers to manage talent and steer career goals based on business needs 	 Coach business leaders to drive self-directed and manager-guided personalised career development Lead career coaching / counselling and provide guidance on continuous upskilling and retirement planning for key talent 	 Cloud-based platforms will host talent profiles and allow for real-time access across multiple geographical locations to internal talent marketplace and deployment opportunities based on skills Predictive analytics through AI will help to determine existing and future capability gaps 	
 Develop cost-efficient career management strategies to build strong core of talent 	 Balance business needs and individual aspirations across diverse groups of talent in leading the development of assessment frameworks and career journey architecture to identify talent capabilities and enable career development 	Al and analytics embedded in assessment technologies will provide real-time collection of data on career development programmes and sentiment analysis	
Task does not exist in current role	 [NEW] Establish data-driven framework to measure effectiveness and ROI of the career management programmes 	 Data metrics linked to business performance indicators will allow for measurement of effectiveness of career management programmes 	
	Strategising Succession Planning		
 Engage the business to evaluate critical talent needs and capabilities based on future requirements and trends 	 Evaluate critical needs and capabilities required based on future business needs and external landscape through data-driven analytics 	 Analysis of talent data will provide insights on existing capability and skills gaps Al will enhance industry scans to provide market-focused insights 	
 Develop guiding principles for succession planning of senior business leadership and pivotal positions 	 Collaborate closely with the business to define succession planning principles and design innovative ways for leadership and high-potential development such as special projects, sprints, and special development programmes 	 Increased emphasis on understanding of business needs and key roles within the organisation will enhance design of succession planning principles Data analytics will enable analysis of intangibles such potential data to uncover "hidden talent", predict performance potential or potential derailments on stretch assignments etc. in order to provide a robust analysis for high-potentials 	
 Construct succession plans, considering current and future business plans to build leadership pipeline 	 [NEW] Drive analysis of talent data through relevant data models to predict key instances that will impact succession plans, including flight risks and time-to-productivity analysis Coach business leaders and managers and develop succession plans empowering the business to be accountable for implementation 	 Talent metrics could be built into integrated systems which enable real-time tracking of talent data and timely notifications when metrics of key instances are triggered Advanced analytics, including predictive analysis helps to predict key instances such as flight risk of incumbents in key positions for decision making as well as enable complex talent and business scenario planning analysis to uncover hidden talent, optimise succession planning strategies, and explore performance potential predictions 	

Head, Talent Management

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Personalised Talent Management	Design personalised talent management strategies and frameworks as a key component of Talent Value Proposition (TVP) by considering the diverse talent personas and business needs
Strategic Talent Deployment	Develop skill-based talent deployment strategy and framework and guide the implementation through seamless technology integration to enhance the integrated skills repository and talent matching that will enable stronger synergy between talent and the role performed
Capability Assessment Framework	Guide the development of capability assessment framework by leveraging data on industry demands, talent profiles and business needs to highlight future gaps
Career Journey Design	Guide the design of the career journey architecture to build future organisational capabilities and enable talent to achieve desired career aspirations based on their personas
Succession Planning	Drive development of succession plans for key talent, high-potentials and leadership roles, by leveraging relevant data analytics on individuals and organisation to enhance succession plans

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will strategise the development of personalised talent management framework, policies and programmes based on the analysis of business needs, talent aspirations and characteristics as well as the demands of a dynamic and agile organisation structure. Agile organisation structures will demand talent deployment to be geared towards matching skills to specific work tasks and projects, thus creating a talent-task marketplace to match talent to various work opportunities. This will lead to more fluid and project-based career pathways for individual talent. These will be tracked through blockchain technology and online records of talent profiles will be created to accelerate talent deployment.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'I'III

Manager, Talent Management

Job Family: **Talent Management**

Impact level: Medium



- The role will focus on developing an in-depth understanding of business needs and align talent management strategy for diverse groups of talent leveraging data analytics and talent capabilities required in the future.
- Identify capability gaps based on business requirements and talent characteristics to help drive the business outcomes.
- Drive implementation of personalised and self-directed career journeys, supported by technology.
- Lead the organisation towards a talent-centric culture and drive the communication of the various talent management programmes.





Artificial Intelligence (AI) & Machine Learning (ML)



Mobile Applications



Social Media

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Designing Total Talent Management Framework	
 Implement talent management frameworks and lead development of toolkits to provide clarity 	 Consult the business on developing elements of total talent management framework such as career progression, succession management, etc. Recommend technologies to enhance talent management processes Implement personalised and self-directed talent management processes for diverse talent groups and to develop future capabilities of talent to meet business needs 	 Skills repositories along with knowledge of talent preferences and aspirations will support the development of personalised and self-directed talent journeys Mobile applications will be used to deliver talent management programmes such as skill and career progression pathways Communication platforms such as mobile applications and social media coupled with proactive nudging will enable delivery of self-directed and personalised talent management activities
Task does not exist in current role	 [NEW] Engage business managers and equip them to deliver personalised and self- directed talent journeys for talent 	 Dashboards with real-time feedback and data insights on talent will enhance talent management programmes
 Implement feedback collection processes and gather talent related data on effectiveness of talent management programmes 	Task substituted by technology	Mobile applications and AI will allow collection of frequent and real-time feedback to enhance talent management programmes
 Make recommendations and incorporate feedback to enhance effectiveness of talent management programmes 	 [NEW] Use analytics to predict the effectiveness of talent programmes on business outcomes to support the business case Recommend changes to the talent management programmes based on analysis of programme ROI 	 Analysis of metrics linked to business performance indicators will help to predict and test the effectiveness of talent programmes

Manager, Talent Management

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
Designing Career Journeys		
 Design and execute career management processes to identify talent profile, develop and retain the right talent in accordance to organisation-wide career management framework 	 Design customised and skill-based career journeys for diverse groups of talent Implement integrated platforms to enable self-directed career journeys 	 Data analytics and AI will analyse historical and market data to suggest typical career development pathways for new talent that will auto-update based on organisation and market changes Mobile applications and cloud systems will allow collection of real-time data from each individual talent and enable customisation of career management initiatives
 Engage business managers to provide career development advice and manage individual talent based on business needs 	 [NEW] Align business needs and aspirations of diverse groups of talent in developing the assessment approach to assess capabilities and enable effective talent deployment and career development Coach business managers to manage and promote self-directed and personalised career development Provide career coaching and offer advice on continuous upskilling and retirement planning to talent 	 Al and analytics embedded in the systems will provide real-time collection of data on career development programmes and sentiment analysis Cloud-based resource platforms will host talent profiles which can be accessed across multiple geographical locations and predictive analytics will recommend suitable real-time deployment destinations for individual talent
 Implement cost-efficient career management strategies to build strong core of talent 	 Identify relevant metrics and ROI indicators to assess effectiveness of career management programmes 	 Data analytics and predictive modelling of talent management with metrics business performance indicators, will enable programme effectiveness measurements as well as provide insights on areas of improvement
	Strategising Succession Planning	
 Assess criticality of talent and capabilities based on future needs 	 Analyse future business needs, identify critical capabilities and obtain buy-in from business using data-driven analytics 	 Analysis of talent data will provide insights on existing capability and skills gaps while AI will enable industrial scans and provide market-focused insights
 Support design of succession plans, considering current and future business plans to build leadership pipeline 	 Work closely with the business to develop succession plans and recommend innovative ways of developing critical capabilities in high-potentials such as sprints, cross-functional teams, and secondments 	 Increase emphasis on understanding of business needs and key roles within the organisation will enhance development of succession plans Data analytics will enable tracking of stretch development projects to identify required support for high-potentials
 Guide the implementation of succession plans for senior business leadership and pivotal positions 	 [NEW] Provide insights and predict key instances, such as flight risks and time-to-productivity analysis for critical talent to ensure engagement and develop critical capabilities and roles Guide the implementation of succession plans and empower the business to be more proactive in developing talent for succession 	 Talent metrics could be built into integrated system which enable real-time tracking of talent data and timely notifications when metrics of key instances are triggered Advanced analytics, including predictive analysis will enable complex scenario planning and uncover hidden talent, optimise succession planning strategies, and explore performance potential predictions as well as provide information on the most useful type of intervention

Manager, Talent Management

Future skills* (Role-specific)

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Personalised Talent Management	Develop and implement differentiated talent management programmes and processes tailored to the diverse talent personas
Strategic Talent Deployment	Implement an integrated skills repository and talent matching platform that enable mapping of talent metrics to the talent deployment strategy of the organisation to increase time-to-productivity and minimise mismatch between job and talent
Capability Assessment Framework	Lead assessment of talent profiles and business needs by leveraging analytics and benchmarking to the industry to identify future capability gaps to recommend solutions
Career Journey Design	Develop the career journey architecture to build future organisational capabilities, and support talent in achieving desired career aspirations based on their personas
Succession Planning	Facilitate the business to develop succession plans for key talent and high-potentials by incorporating data analytics on individual profiles, performance and organisation needs to enhance succession plans

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will implement personalised talent management processes across diverse talent groups in alignment with business needs and a dynamic and agile organisation structure. The role will draw links between skills and tasks within an agile organisation structure and enable accurate matching of capabilities to work areas. Technology such as blockchain could greatly enhance personalisation of talent management solutions and facilitate talent deployment.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Executive, Talent Management

Job Family: **Talent Management**

Impact level: Medium



- This role will focus on executing personalised talent management activities and introducing technology to support self-directed talent journeys within the organisation.
- Enhance understanding of business needs and implement talent management programmes for diverse groups of talent to meet business outcomes.
- Support the management of central skills repository and conduct targeted analysis on talent gaps based on organisation needs.
- Organisation wide communication of talent management programmes to support a talent-centric culture throughout the organisation.





Artificial Intelligence (AI) & Machine Learning (ML)



Mobile Applications



Social Media

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Implementing Personalised Talent Management Practic	es
 Support the development and implementation of talent management framework and toolkit to all talent 	 Support development of total talent management framework and conduct data analysis based on demands of the business Support the implementation of personalised and self-directed talent management processes to meet business and talent needs 	 Mobile applications will deliver talent management programmes and data insights on talent will be provided to managers for decision making Social robotics and AI with integrated cloud system provide personalised responses to queries as well as the delivery of self-directed and personalised talent management activities
 Collect feedback on talent management programmes to ascertain effectiveness of talent management programmes 	Task substituted by technology	 Mobile applications and AI allow for collection of frequent and real-time feedback to automate information collection and enhance talent management frameworks
Task does not exist in current role	 [NEW] Provide data-driven insights to improve the effectiveness of talent management programmes 	 Dashboards with real-time feedback and data insights on talent to analyse effectiveness of talent management programmes
 Coordinate career management processes to identify talent profile, develop and retain the right talent to meet organisation needs Address complex queries from managers and talent on career management framework and developmental pathways 	 Develop talent profiles based on talent needs, personas and aspirations [NEW] Support the implementation of integrated platforms to allow seamless access of various HR systems and enable self-directed career journeys Guide talent and managers to enable self-directed career journeys by providing information and resources 	 Skills repository will capture robust data on talent and enables quick identification of talent profiles based on given parameters and; data analytics will provide real-time and actionable insights to fine-tune talent profiles to enhance accuracy Data analytics and AI will be used to analyse historical and market data such as industry trends as well as talent-related data to provide real-time recommendations on career development pathways and job matches Communication platforms such as mobile applications and social media coupled with proactive nudging will enable delivery of self-directed career journeys
Task does not exist in current role	 [NEW] Support career coaching initiatives and facilitate conversations with talent regarding retirement planning 	 Cloud-based system will store relevant information on all talent profiles, enable quick updates to documentation and with AI and analytics embedded in the system, provide suitable deployment destinations for individual talent, which can be accessed across multiple geographical locations

Executive, Talent Management

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Supporting Succession Planning Process	
 Analyse succession profiles and profiles of potential candidates to support decision- making process 	 Analyse succession profiles as well as talent capabilities, preferences and aspirations to identify suitability of talent for key positions 	 Cloud-based resource platforms will host talent profiles of the entire workforce and allow quick analysis on talent capabilities and characteristics as well as market trends in an integrated view
■ Task does not exist in current role	 [NEW] Analyse key roles within the organisation that are critical and apply relevant parameters to provide a list of potential successors for grooming into these key roles 	 Data analytics and AI will be used to analyse historical talent data and profile needed for the key roles to identify potential successors for grooming of capabilities

Future skills* (Role-specific)

Focus areas	Descriptions	
Personalised Talent Management	Support the implementation of personalised talent management programmes and initiatives tailored for the diverse talent personas	
Capability Assessment Framework	Analyse talent profiles and identify critical capability gaps through data analytics based on business needs	
Career Journey Design	Analyse individual talent personas to determine talent aspirations and support the development of career journey architecture to enhance organisational capabilities	
Succession Planning	Conduct in-depth analysis of succession profiles and individual talent profiles for key positions by leveraging talent and business metrics such as capabilities, performance, and aspirations to identify suitable talent	

Executive, Talent Management

Future skills* for all HR executives

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

The role will lead the execution of talent management initiatives that deliver personalised talent experience across diverse talent groups within a dynamic and agile organisation structure. The role will derive real-time insights from analysis of talent skills and work tasks and provide inputs on potential fit within an agile organisation structure. There will be an emphasis on using identification technology such as blockchain to create dynamic and easy-to-access talent profiles for each talent, which enables real-time and accurate talent profiling, within the organisation. This allows for effective talent allocation and recommendation of suitable talent management initiatives, on areas such as career pathways and development plans.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'I'III

Associate, Talent Management

Job Family: Talent Management

Impact level: High



- This role support personalised talent management activities and the design of self-directed talent journeys to allow talent to decide on their own development in the organisation.
- Maintain the organisation's skills repository and support analysis of talent data based on targeted organisational needs.
- Support communication on various talent management programmes to support a talent-centric culture within the organisation.





Artificial Intelligence (AI) & Machine Learning (ML)







EXPECTATIONS TODAY EXPECTATIONS WITHIN THREE YEARS NEW APPROACHES TO TASKS Implementing Personalised Talent Management Practices Task does not exist in current role [NEW] Segment talent data and provide initial scans on skills gaps based on business Analysis of talent data taking into consideration business needs to enable relevant needs to support total talent management framework segmentation of talent data and provide initial findings on skills gaps Execute talent management activities in Execute talent management activities to support personalised and self-directed talent Mobile applications will drive personalised communication with talent accordance to talent management framework journeys in accordance to total talent management framework and policies and policies Develop materials on personalised talent management processes to support self-directed talent journeys Respond to queries relating to talent Task substituted by technology Al chatbots will automate the resolution of standard policy-related, process-related and management and assessment procedural talent management enquires through personalised responses Task does not exist in current role [NEW] Prepare initial insights on talent management programmes through analysis Communication platforms such as mobile applications will become a main source of realof real-time data from both HR and non-HR sources such as employee engagement time feedback for talent management programmes scored, performance rating, business and financial performance etc. Document talent profiles identified for Task substituted by technology Al and ML will automate documentation process, with minimal recruitment, retention and development within human intervention the organisation Task does not exist in current role • [NEW] Support creation of talent profiles by understanding unique talent needs and Al and analytics embedded in systems will provide real-time capturing of targeted and personas, leveraging data captured in the skills repository to support retention and robust data within skills repository and allow quick identification of talent profiles based on development of top talent given parameters to provide a list of talent that meets the requirements Task does not exist in current role [NEW] Engage with peer-level talent to identify talent needs and aspirations for Cloud-based system will store relevant information on all talent profiles, enable quick updates to documentation and with AI and analytics embedded in the system, provide career coaching suitable deployment destinations for individual talent, which can be accessed across multiple geographical locations

Associate, Talent Management

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
 Document talent profiles identified for recruitment, retention and development within the organisation 	Task substituted by technology	 Al chatbots will automate the resolution of standard policy-related, process-related and procedural career management and development enquires
Task does not exist in current role	 [NEW] Develop skill-based career development reference materials to deliver information and support implementation of personalised career development pathways 	Communication platforms such as mobile applications coupled with proactive nudging will enable delivery of personalised career development pathways
Supporting Succession Planning Process		
 Extract succession profiles from system and prepare talent profiles of potential candidates to support decision-making 	 Extract succession profiles and provide initial assessment of potential candidates against these profiles to support decision-making 	 Cloud-based platforms will host talent profiles of the entire workforce and allow quick comparison of talent capabilities against skills requirements in succession profiles
Task does not exist in current role	 [NEW] Identify parameters for consideration to generate a shortlist of potential candidates for critical roles within the organisation 	 Analysis of historical talent data and movements will provide insights on existing capability and skills gaps of potential successors

Future skills* (Role-specific)

Focus areas	Descriptions
Personalised Talent Management	Analyse the diverse talent personas and provide inputs for differentiated talent management approaches and initiatives
Capability Assessment Framework	Support analysis of talent profiles and provide initial findings on capability gaps based on business needs
Career Journey Design	Support analysis of individual talent personas and provide inputs to support the development of career journey architecture
Succession Planning	Conduct comparison analysis between succession profiles and talent profiles to derive meaningful data-driven insights for the development of key talent

Associate, Talent Management

Future skills* for all HR associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Support talent initiatives by applying knowledge of business and basic financial indicators as well as workforce analytics
Data-driven Story Telling	Develop initial data-based findings and visualisations to support a clear and logical narrative
People Analytics	Conduct initial analysis of talent and business metrics, including intangible metrics, and support the development of predictive models to derive meaningful insights
Organisational Behaviour and Change Management	Support change management initiatives and communications to talent by guiding them on use of technology for real-time multidirectional engagement and helping to answer any specific queries regarding the change initiatives
Agile Mindset	Research on agile ways of working, structures and processes and provide inputs on ways of enhancing adaptability and collaboration within the organisation
HR Technology Adoption	Research the HR technology landscape to identify potential technologies to enhance the talent lifecycle
Relationships and Communication	Identify own emotional patterns and communication style to effectively work and communicate with stakeholders and support the execution of communication plans for relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Support implementation and continuous feedback collection for workforce policies across diverse talent groups through technology tools and platforms

Beyond three years

The role will support talent management initiatives to deliver **personalised career experiences** for talent across diverse groups within a **dynamic and agile organisation structure**. Technology such as Al will greatly augment the expectations on the role by automating more routine processes and allow it to focus on analysing talent capabilities and tasks to provide initial observations on potential fit within an agile organisation structure. Identification technology such as blockchain will be leveraged to create **dynamic and easy-to-access talent profiles** for each talent within the organisation that can be updated in **real-time** and enhance accuracy of talent profiling.

Appendix | a. Impact and Skills Analysis Willis Towers Watson III'I'II

Head, Learning and Organisation Development

Job Family:

Learning and Organisation Development

Impact level: Medium



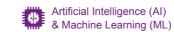
- The role will focus on developing an integrated digital learning roadmap that caters to the needs of individual talents as well as business requirements.
- Orchestrate change and transformation across the organisation and serve as an organisation transformation expert.











EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Developing Learning and Development Framework	
 Engage business leaders to clarify current and emerging capability requirements of the business 	 Identify current and emerging capability needs for the future, to keep an ongoing pulse on business capabilities needs and develop a forward-looking skills development strategy Engage business leaders and drive the development and adoption of digital learning strategy Guide HRBPs and partner with business leaders to co-create relevant learning and development plans based on emerging skills needed to execute the business strategy 	 Al and web-crawling will augment the identification of emerging skills by mining data sources such as job boards and professional networking sites Al & Data Analytics will be used to identify emerging skills and analyse internal talent profiles to assess the gaps
■ Task does not exist in current role	 [NEW] Outline concepts for skills assessment frameworks in alignment to organisation strategies and drive innovative learning and development programmes enabled through technology [NEW] Outline learning strategies that provide a conducive environment and infrastructure which motivates learning within diverse talent groups and allow the application of the learning back into the business [NEW] Spearhead strategic partnerships and alliances to develop critical skills for the future 	 In-depth knowledge of the digital learning solutions landscape and how various solutions can be delivered via an integrated, on-demand learning platform to enable self-directed learning Technology platforms and vendors with innovative learning solutions such as Augmented Reality / Virtual Reality, etc. will enable personalised learning options for talent
 Develop financial budgets for learning and development interventions and assess their effectiveness Review the business impact of learning and plan future development strategies 	 [NEW] Define the digital learning roadmap for diverse talent groups and ensure high quality user experience Develop data-driven approach for measuring the effectiveness of learning and development programmes as well as knowledge retention and their impact on business performance 	 Principles of design thinking and user experience design will be applied to design the learning journeys for the diverse talent groups to enhance overall user experience Data analytics and predictive modelling will enable programme effectiveness measurement to develop business case for learning investments

Head, Learning and Organisation Development

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
	Driving Organisation Transformation through Culture Alignment		
 Develop an overarching view of industry-wide changes and incorporate elements of strategy for organisation development and change initiatives Recommend or design organisational change diagnostics to assess the organisation's capability and agility to respond to organisational changes 	 Develop an overarching view of industry-wide changes and incorporate elements of strategy to develop business case and plan for driving organisation transformation Develop operating models and design principles on organisational strategies through shift towards an integrated operational-improvement programme along with the integration of technologies to deliver business outcomes [NEW] Set direction for organisation design through analysis of business strategy and incorporate elements of agile organisation structure to obtain flexibility and scalability for future needs 	 Data analytics and AI will analyse business strategy, market data, and workforce trends to predict future workforce demands and organisation structure for achieving business outcomes 	
 Oversee delivery of organisation development and change initiatives to achieve intended outcomes 	 [NEW] Translate the desired culture and values into initiatives and oversee the delivery through communication technologies and analytics to drive the right behaviours Develop approaches and business and talent metrics to measure the effectiveness of organisation transformation and change management initiatives on business outcomes 	 Communication platforms such as social media and mobile applications will enable real-time talent feedback on culture change initiatives and continuous engagement Data analytics, sentiment analysis, and AI will keep track of talent morale and insights to evaluate change effectiveness and impact on business outcomes 	
 Establish a change management delivery model that addresses organisational development and change management needs Influence business leaders to buy into organisational development and change initiatives 	 Develop communications strategy and coach business leaders on new ways of working such as servant leadership and permeating culture into processes to influence mindset change across the organisation [NEW] Provide advisory to business leaders to shape the desired organisational culture and promote elements of sustainability, digital citizenship, diversity and inclusion, and purpose within the organisation 	 Multi-channel communication strategies leveraging social media and mobile applications will deliver regular communications and nudges to drive the right behaviours within the organisation 	

Head, Learning and Organisation Development

Future skills* (Role-specific)

Focus areas	Descriptions
Self-Directed Learning	Articulate the vision for self-directed learning in the organisation and coach leaders to encourage and rewards self-directed learning behaviours
Learning and Development Strategy, Delivery and Experience	Develop learning and development strategy and roadmap for the organisation in alignment with the future talent needs and organisation strategy as well industry trends. Drive technology integration to enhance overall learning experience and enable rapid upskilling and reskilling for diverse talent groups to meet current and future needs of the business and talent
Organisation Transformation	Drive organisation transformation strategies and programmes that impact organisation-wide structures, processes, behaviours, in alignment with business strategy, workforce trends and disruptive technologies, and enhance organisational effectiveness and performance
Workplace Culture and Change Management Advisory	Drive strategies to achieve desired organisational culture throughout the entire organisation through design and delivery of programmes, by leveraging understanding of social drivers in the organisation. Provide coaching to senior leaders and empower them to promote change across the organisation
Design Thinking	Build and integrate culture that encourages human-centred strategies for development of programmes which lead to enhanced talent experience
Content Marketing Strategy	Design differentiated marketing strategies for diverse talent groups to promote learning and development programmes and influence sign-up rates
User Experience / User Interface Design	Formulate guiding principles and concepts for intended user experience and interfaces, and direct development of prototypes and customised graphical user interfaces to anticipate user requirements and adopt industry best practices
Sustainability and Digital Citizenship Governance	Design inclusive and ethical workplace strategies to drive the organisation to have a positive impact on the environment, community, society, or economy. Develop policies and guidelines for corporate and digital citizenship to safeguard business
Omni-channel Communication	Develop communication strategies to optimise use of multi-channel platforms for the delivery of communication messages to create integrated talent experiences

Head, Learning and Organisation Development

Future skills* for all HR heads

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The role will facilitate the reassessment of organisation's corporate purpose in **collaboration with senior stakeholders**. Data-driven insights and Al will be utilised to **redesign the organisation** based on emerging trends. The role will **drive adoption of experiential technology** in Learning and Development such as AR / VR and inspire **self-directed**, **on-demand learning**. Furthermore, the role will drive the navigation of organisational development changes in the operating environment and technology landscape by **continuously evaluating strategies** to **shape the structure**, **organisational capabilities and culture of the organisation**.

Appendix | a. Impact and Skills Analysis WillisTowers Watson III'IIII

Manager, Learning

Job Family: Learning

Impact level: Medium



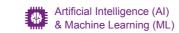
- The role will focus on developing a digital learning strategy for reskilling / upskilling of talent based on future business requirements, with an emphasis on designing personalised learning journeys.
- Deliver personalised learning journeys through best-in-class content curation and on-demand and bite-sized learning delivery to enable high quality user experience for diverse groups of talent.

Mobile Applications









EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Developing Learning Strategy	
 Implement and conduct learning needs analysis to assess areas of development in alignment to business goals 	 Identify emerging skills for the future through industry research and evaluate skills gaps for the organisation Lead the development and implementation of skills assessment across the organisation to assess future needs 	 Mobile applications can enable the assessment of skills at individual levels Al & Data Analytics will be used to identify emerging skills and also to analyse internal talent profiles to assess the gaps
 Develop learning and development strategy and plan to improve overall workforce capabilities Formulate plans to develop current and future roles and promote lifelong learning 	 Develop learning and development strategy with a focus on the digital learning strategy and design of personalised learning pathways for diverse talent groups to enable self-directed learning Evaluate digital learning solutions based on their content quality, user experience, automated analytics capabilities and integration compatibility with the organisation's platforms [NEW] Plan and execute innovative partnerships with education institutions, industry and professional bodies to develop critical skills for the workforce (e.g. through signature programmes, talent exchange, alliances) 	 Principles of design thinking and user experience design applied to the design of digital learning strategy to consider needs of diverse groups of talent Mobile applications and communication devices with nudge mechanisms will enable the promotion of self-directed learning as well as enhance peer learning where talent can easily share experiences and learn from one another
Task does not exist in current role	 [NEW] Drive interest in learning and effective development by leading the development of communities of practice and other innovative initiatives such as peer learning and blended learning 	 In-depth knowledge of learning needs and solutions to deliver impactful learning experiences via an integrated, on-demand learning platform will enhance talent interest for development

Manager, Learning

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Curating Learning Content	
 Develop suitable curricula for learning and development Identify skills and competencies and determine proficiency indicators that will guide learning and development 	 [NEW] Curate learning content and identify suitable learning courses that address future business needs and skills development [NEW] Drive self-directed learning through developing personalised, bite-sized, ondemand content in collaboration with content designers to motivate and empower talent in meeting own learning needs 	 AI-enabled content curation technologies and applications will enable quick shortlisting of existing learning content that are continuously updated in real-time Technology platforms and vendors with innovative learning solutions such as Augmented Reality / Virtual Reality, etc. will enable personalised learning options for talent Mobile applications embedded with AI and nudge mechanism will enable the promotion of relevant learning courses to individual talent based on their needs in alignment to achieving business outcomes
 Identify and evaluate areas of improvement based on feedback regarding learning programmes 	 Identify and evaluate areas of improvement based on feedback to enhance learning content iteratively and ensure personalised learning content and delivery 	 Al embedded in Learning Management Systems will provide real-time collection of feedback on learning experiences
	Delivering Personalised Delivery and Learning Experien	nce
 Deliver content through innovative and creative training delivery to increase effectiveness of learning and development interventions 	 [NEW] Deliver content through innovative and creative training delivery such as ondemand and bite-sized learning experiences for diverse talent groups Plan, communicate and coach talent on available learning and development resources through multiple platforms to address skill gaps and promote self-directed learning 	 Social media and mobile applications will enhance training delivery for greater effectiveness Technology platforms equipped with feedback mechanisms will enable collection of real-time feedback on training delivery and allow for continuous improvement
 Analyse data metrics on learning to assess effectiveness and return on investments (ROI) of specific learning and development programmes 	 Lead analysis to assess effectiveness of learning and development programmes through frequent and real-time feedback Analyse data metrics tracked via learning platforms to assess effectiveness and return on investments (ROI) of specific learning and development programmes on business outcomes [NEW] Lead analysis to measure the retention of knowledge across the different job roles and levels throughout the organisation 	 Al and analytics embedded in the systems will provide real-time collection of data on programmes and sentiment analysis which can be shared as feedback with managers and HR Analysis of feedback on programmes against business performance indicators over a period of time will help measure the effectiveness of learning and development programmes as well as knowledge retention

Manager, Learning

Future skills* (Role-specific)

Focus areas	Descriptions	
Self-Directed Learning	Advocate mindset change to influence talent to take initiative in diagnosing own learning needs, formulating learning goals and identifying resources for learning. Develop and run programmes to drive the behaviour change across the organisation	
Learning and Development Strategy, Delivery and Experience	Curate learning content based on future business and talent needs to provide inputs for the organisation-wide learning roadmap. Identify the technology solutions (e.g. Learning Management System (LMS), augmented reality / virtual reality, etc.). Integrate technology with the learning and development strategy to deliver impactful learning experience, enable rapid upskilling and reskilling to build required capabilities	
Design Thinking	Recommend innovative techniques and technologies to develop human-centred processes and programmes, and drive experimentation considering talent needs to enhance talent experience	
Content Marketing Strategy	Implement differentiated marketing plans for learning content across diverse talent groups to enhance sign-up rates for learning and development programmes	
User Experience / User Interface Design	Create user experience design concepts and flow charts, and collaborate with experts to drive the development of graphical user interfaces. Challenge the experts on limitations to drive best outcomes to align with the desired user experience	
Sustainability and Digital Citizenship Governance	Implement learning plans and programmes to drive a positive impact on the environment, community, society, or economy as well as to educate talent on elements of corporate and digital citizenship risks and guidelines	
Omni-channel Communication	Drive use of relevant communication touchpoints suitable for diverse groups of talent ensuring consistency of talent experiences across the platforms	

Manager, Learning

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will continuously **identify critical skills** based on the understanding of the business objectives as well as the industry. There will be an increased emphasis on **delivery of content through innovative and experiential technologies** such as AR / VR. The role will enable **self-directed learning** and enhance the overall learning and development experience. Technologies such as Al and Content Platforms will allow the automation of **real-time updates** and **curation of learning content**. Al could also be leveraged to create new learning content based on **current and future user needs**.

Manager, Organisation Development

Job Family:
Organisation Development

Impact level:



- The role will develop and implement programmes to drive organisation transformation, culture alignment and change management for future business needs.
- Guide development of initiatives that target sustainability, digital citizenship, and organisation's reputation.

Mobile Applications



Cloud Technolog





EXPECTATIONS TODAY EXPECTATIONS WITHIN THREE YEARS NEW APPROACHES TO TASKS Driving Organisation Transformation through Culture Alignment Conduct organisational diagnosis to assess and Work closely with the business to conduct organisational diagnosis and project Data analytics and Al will analyse business strategy, market data, and workforce trends to predict future workforce demands and organisation structure for achieving analyse the current state future workforce demands based on organisational design through identification of dysfunctional aspects of workflow, structures and systems, and realigning them to fit business outcomes Identify opportunities for organisation business goals development and / or change interventions Develop plan for organisation transformation and change management initiatives Plan and execute organisation development considering agile and flexible organisation structures and a broader talent ecosystem and / or change interventions to facilitate organisation development and / or change [NEW] Evaluate existing organisation structure and engage the business to provide inputs on organisation design, incorporating elements of agile organisation structure Facilitate and evaluate effectiveness of Evaluate effectiveness of organisation transformation programmes and change initiatives Communication platforms such as social media and mobile applications will enable organisation development and change initiatives through analysis of impact on business outcomes real-time talent feedback on culture change initiatives as well as continuous engagement to provide positive talent experiences on the change initiatives to help build the [NEW] Leverage data, including measurement of intangible metrics such as talent desired culture sentiments, to determine impact and effectiveness of organisation transformation and change management initiatives Data analytics, sentiment analysis and AI will keep track of talent morale and insights to evaluate people risks, culture misalignment as well as programme and change effectiveness Social media, chatbots and mobile applications coupled with proactive nudging will enable Execute broad based communications strategy Plan and execute communications strategy to communicate initiatives of organisation to articulate the business case, importance, transformation to embed desired culture and values across the talent lifecycle and delivery of programmes for change and organisation transformation and impact of organisation development and / touchpoints of diverse talent groups • Communication platforms will enable continuous engagement with both the business or change interventions on the overall business [NEW] Engage with the business and talent to understand the desired culture and and talent in order to obtain early buy-in for effective organisation transformation and objectives articulate elements of sustainability, digital citizenship, diversity and inclusion, and culture alignment Manage stakeholders to support organisation purpose to promote the right behaviours and guide talent on new ways of working development and change interventions

Manager, Organisation Development

Future skills* (Role-specific)

Focus areas	Descriptions
Organisation Transformation	Develop organisation-wide transformation plans aligned with the business strategy to lead changes to organisational structure, processes and behaviours, based on workforce trends and disruptive technologies
Workplace Culture and Change Management Advisory	Advocate desired organisational culture and influence talent towards desired state through design and delivery of programmes, leveraging understanding of social drivers in the organisation. Coach managers on change management processes to facilitate change and influence talent to embrace change
Design Thinking	Recommend innovative techniques and technologies to develop human-centred processes and programmes, and drive experimentation considering talent needs to enhance talent experience
User Experience / User Interface Design	Create user experience design concepts and flow charts, and collaborate with experts to drive the development of graphical user interfaces. Challenge the experts on limitations to drive best outcomes to align with the desired user experience
Sustainability and Digital Citizenship Governance	Implement plans and policies to drive a positive impact on the environment, community, society, or economy as well as provide advice to talent on elements of corporate and digital citizenship risk and guidelines
Omni-channel Communication	Drive use of relevant communication touchpoints suitable for diverse groups of talent ensuring consistency of talent experiences across the platforms

Manager, Organisation Development

Future skills* for all HR managers

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead implementation of appropriate talent strategies based on the knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance
Data-driven Story Telling	Develop narratives from data-based insights to build a business case and influence stakeholders on talent strategies and decision making
People Analytics	Lead analysis of linkages between talent and business metrics, including intangible metrics. Guide the development of suitable predictive models based on talent agenda to enhance existing talent programmes and guide development of new talent solutions
Organisational Behaviour and Change Management	Execute organisation-level change programmes and deploy technology to implement new change management techniques to elicit desired behaviours
Agile Mindset	Implement strategies to facilitate agile ways of working by promoting collaboration and cross-functional work as well as structures and processes that are quickly adaptable to changes. Guide leaders to develop a mindset shift in talent towards a dynamic organisational culture
HR Technology Adoption	Evaluate and recommend relevant technology solutions to enhance efficiency and effectiveness across the talent lifecycle. Determine benefits of technology implementation for enhanced talent experience
Relationships and Communication	Build trust and rapport with stakeholders and implement communication plans and collaboratively work towards desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Evaluate existing workforce policies and legislations, and latest trends for diverse talent groups against talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to provide data-driven recommendations to the business for adoption of progressive and inclusive practices

Beyond three years

The role will continue close collaboration with the business to support organisation transformation. The role will facilitate the continuous measurement of culture and drive programmes to reinforce culture due to changes such as agile organisation structures, job redesign, continuous talent transitions and increased use of contingent talent. Communication and experiential technologies will continue to evolve radically e.g. use of AR / VR and the role is expected to leverage those based on suitability to deliver an effective talent experience for shaping the culture of the organisation.

Executive, Learning and Organisation Development

Job Family:

Learning and Organisation Development

Impact level: Medium



- The role will focus on analysis and assessment of current skills and assist to identify future skills and learning needs as well as measure progress of organisation transformation initiatives.
- Support in content curation and identifying suitable delivery of learning programmes through technology.
- Conduct user experience tests for learning programmes and support the assessment of training effectiveness.
- Mobile Applications









EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS	
	Analysing Future Workforce Needs		
 Analyse data gathered on competencies and gaps to identify areas of development 	 Conduct skills assessment across the organisation to support the identification skills gaps and competency levels as well as critical skills needed 	 Data analytics will be used to provide insights on skills and learning needs required in the future 	
	 [NEW] Conduct analysis of the external workforce and identify emerging skills needed in the future to meet business needs 	 AI & data analytics will be used to identify emerging skills and analyse internal talent profiles to assess the gaps 	
 Analyse business impact of learning investments to prioritise learning needs 	 [NEW] Conduct analysis to identify impact of workforce trends on talent demands and provide suitable recommendations on future needs 	 Al-enabled analytics on market data, and workforce trends will help predict future workforce demands and organisation structure for achieving business outcomes 	
	Analysing Learning and Change Programmes		
 Update learning content used in internal trainings 	 Coordinate with content designers to identify suitable learning content for the development of skills of talent 	 Application of design thinking will help to create an optimal learning experience that to address learning needs for diverse talent groups 	
 Liaise with trainers and vendors for scheduling and conducting learning programmes 	 Negotiate with trainers and vendors to manage non-routine scheduling and conduct of learning programmes 	 Learning Management Systems will allow trainers and vendors to schedule and conduct learning programmes, with minimal HR intervention 	
 Analyse learning programme content and trainers for their suitability to meet learning needs 	 [NEW] Conduct and guide user experience tests to understand the effectiveness of learning and change management communications 	 Mobile applications will enable continuous collection of data and engagement across diverse talent groups as well as track success of learning and change initiatives 	
	 Guide the analysis on the suitability of learning programme content and trainers against talent metrics (e.g. learning usage and adoption, talent performance) to assess effectiveness of learning programmes in addressing skills gaps 	 Learning Management Systems will regularly capture and analyse data on the effectiveness of the learning interventions as well as quality and relevance of off-the-shelf learning programmes 	
Task does not exist in current role	 [NEW] Facilitate training for managers on identification and development of competencies in talent 	Learning Management Systems will allow training to be attended on-demand	

Executive, Learning and Organisation Development

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Supporting Personalised Programmes Delivery	
 Communicate schedules for learning programmes and objectives with the talent 	 Develop information to communicate learning and change management programmes and opportunities to diverse talent groups and the broader talent ecosystem using technological platforms [NEW] Develop user-guides and communication materials for talent to promote the use of self-directed learning tools across diverse talent groups 	 Social media, chatbots and mobile applications coupled with proactive nudging will enable delivery of programmes for change management Mobile applications will automatically push reminders and notifications of learning programmes, allowing talent to self-direct their learning
 Analyse talent participation rates, evaluation scores, and effectiveness of learning programmes 	 Analyse and measure the impact and effectiveness of learning and development and change management programmes based on real-time feedback 	 Mobile applications and communication platforms will enable the collection of real-time feedback Data analysis of feedback on programmes against business performance indicators will provide insights on the effectiveness of programmes

Future skills* (Role-specific)

Focus areas	Descriptions
Self-Directed Learning	Implement initiatives to support talent to initiate self-directed learning including diagnosing own learning needs, formulating learning goals and identifying resources for learning
Learning and Development Strategy, Delivery and Experience	Collaborate with content designers and business to identify relevant learning content for the development of required future capabilities. Support the implementation of technology solutions to enhance learning experience
Organisation Transformation	Lead execution of organisation transformation activities that impact organisation structures, processes and behaviours. Analyse industry trends on workforce and technology disruptions to provide inputs for industry trends
Workplace Culture and Change Management Advisory	Promote desired organisational culture during interactions and collaboration with talent to implement workplace culture alignment
Design Thinking	Research new ideas taking into consideration talent needs and help to develop new human-centred initiatives that can be quickly tested and implemented to enhance talent experience
Content Marketing Strategy	Promote relevant learning content to talent and increase visibility of learning and development programmes through differentiated initiatives such as supplementary learning resources, target materials and encourage active participation for diverse talent groups
User Experience / User Interface Design	Recommend requirements for functionalities, information flows and graphical user interfaces to achieve desired user experience
Omni-channel Communication	Identify the relevant communication touchpoints for diverse groups of talent and review communications to ensure consistency of talent experience across platforms

Executive, Learning and Organisation Development

Future skills* for all HR executives

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Lead execution of talent initiatives by applying knowledge of business drivers, financial indicators, workforce analytics and the impact on business outcomes
Data-driven Story Telling	Guide and review the data-based insights and visualisations and provide inputs for narrative to influence talent-related decision-making process
People Analytics	Apply data mining and analytics techniques to analyse linkages between talent and business metrics, including intangible metrics. Use insights from predictive models to identify impact of talent programmes on the business
Organisational Behaviour and Change Management	Apply understanding of psychological, social and cultural drivers to guide talent towards desired change and apply use of technology and nudges to influence behaviours
Agile Mindset	Execute initiatives that promote agile ways of working, structures and processes which enhance adaptability and collaboration among talent. Provide inputs for improvement based on feedback as well as external research
HR Technology Adoption	Analyse existing processes to identify inefficiencies as well as gaps in talent experience and shortlist possible technology solutions to enhance the processes and experiences across the talent lifecycle
Relationships and Communication	Collaborate with stakeholders and display sensitivity to their needs, and lead the execution of communication plans across relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Collaborate with the business to implement inclusive workforce policies and legislations relevant for diverse talent groups based on data-driven insights and review feedback

Beyond three years

With automation and Al-driven technology, the role will focus on developing insights regarding the **effectiveness of various learning and change management programmes** in the organisation. The role will value-add by conducting deeper analysis and recommending actionable insights on learning and organisational development. There will be an increased emphasis on implementing learning content through innovative and experiential technologies such as AR / VR to redefine the learning experience.

Associate, Learning and Organisation Development

Job Family:

Learning and Organisation Development

Impact level: High



- The role will support analysis of talent data and execute learning and organisation transformation activities.
- Support user testing of the technology and communication tools for learning programmes.
- Conduct the analysis of suitability of learning content and talent metrics on the effectiveness of learning.
- Provide guidance to the talent on usage of self-directed learning tools.
- Mobile Applications
- Soc Med
- Cloud Technolog
- Data
 Analytics
- Artificial Intelligence (AI) & Machine Learning (ML)

Analysing Future Workforce Needs		
 Collate data gathered on competencies and gaps to identify areas of development 	 [NEW] Conduct initial analysis of the external workforce to identify relevant skills needed in the future [NEW] Conduct initial analysis of skills required for the future to support the assessment of skills and capabilities gaps 	 AI and ML will automate much of data collation, cleaning and checking AI-enabled technologies will enable the creation of customisable talent and performance datasets based on data from multiple sources such as performance management and talent feedback to perform analysis and provide actionable insights Data analytics will be used to provide insights on skills and learning needs required in the future
 Compute expenditure for required competencies to support prioritisation of learning programmes 	 [NEW] Provide preliminary observations on prioritisation of future skills and learning programmes through analysis of skills gaps against workforce trends and business metrics 	 AI-enabled analytics on market and workforce trends will help predict emerging critical competencies needed
	Analysing Learning and Change Programmes	
 Maintain database for learning content and make edits where necessary 	Task substituted by technology	 Al-enabled content curation technologies and applications enable continuous update of existing learning content in real-time
 Source vendors for conducting the learning programmes 	 Evaluate and shortlist vendors for the conduct of learning programmes in meeting talent and business needs 	 Al-enabled systems will automate sourcing process to identify possible vendors for the delivery of required learning programmes
Task does not exist in current role Task does not exist in current role	 [NEW] Administer user experience tests on the effectiveness of learning and change management communications and record specifications based on results [NEW] Conduct initial analysis on suitability of learning programme content against talent metrics (e.g. learning usage and adoption, talent performance) to assess effectiveness of learning programmes 	 Data analytics of user test data will be used to optimise learning and change the experience to address talent needs Learning Management Systems will regularly capture and analyse data on the effectiveness of the learning interventions

Associate, Learning and Organisation Development

EXPECTATIONS TODAY	EXPECTATIONS WITHIN THREE YEARS	NEW APPROACHES TO TASKS
	Supporting Personalised Programmes Delivery	
 Maintain communication channels for learning programmes and send instructions and reminders to talent 	 Maintain communication channels for learning and change management activities to ensure consistency in communication across diverse talent groups and the broader talent ecosystem [NEW] Provide information in the usage of technological tools to enable and support self-directed learning for talent 	 Mobile applications will enable continuous engagement across diverse talent groups while serving as a platform to collect data on change management initiatives Mobile applications will automatically push reminders and notifications of learning programmes, allowing talent to self-direct their learning
 Evaluate survey findings to generate learning and post-learning reports 	 [NEW] Conduct initial analysis of the impact and effectiveness of learning and development and change management programmes based on real-time feedback to provide initial insights 	 Mobile applications and communication platforms will provide talent opportunities to provide frequent and real-time feedback Data analysis of feedback on programmes against business performance indicators will provide insights to track effectiveness of programmes

Future skills* (Role-specific)

Focus areas	Descriptions
Self-Directed Learning	Assist talent to initiate self-directed learning and guide the talent on processes related to diagnosing own learning needs, formulating learning goals and identifying resources for learning
Learning and Development Strategy, Delivery and Experience	Research on new technologies and approaches for enhancing the learning experiences. Provide information on the platforms to leverage for suitable learning content that is aligned to the future business and talent requirements
Organisation Transformation	Execute organisation transformation activities and support the analysis of industry workforce trends and technology disruptions
Workplace Culture and Change Management Advisory	Communicate key elements of organisational culture through communication channels to support workplace culture alignment
Design Thinking	Identify potential opportunities to enhance talent experience based on understanding of talent needs and support development of new human-centred ideas and approaches
Content Marketing Strategy	Create appropriate materials to present and increase awareness of learning programmes to diverse talent groups
User Experience / User Interface Design	Analyse user feedback to provide suggestions to the design of user interfaces, functionalities, information flows and graphical user interfaces
Omni-channel Communication	Research on relevant communication touchpoints and develop communications for consistent experience through various communication touchpoints for diverse groups of talent

Associate, Learning and Organisation Development

Future skills* for all HR associates

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Support talent initiatives by applying knowledge of business and basic financial indicators as well as workforce analytics
Data-driven Story Telling	Develop initial data-based findings and visualisations to support a clear and logical narrative
People Analytics	Conduct initial analysis of talent and business metrics, including intangible metrics, and support the development of predictive models to derive meaningful insights
Organisational Behaviour and Change Management	Support change management initiatives and communications to talent by guiding them on use of technology for real-time multidirectional engagement and helping to answer any specific queries regarding the change initiatives
Agile Mindset	Research on agile ways of working, structures and processes and provide inputs on ways of enhancing adaptability and collaboration within the organisation
HR Technology Adoption	Research the HR technology landscape to identify potential technologies to enhance the talent lifecycle
Relationships and Communication	Identify own emotional patterns and communication style to effectively work and communicate with stakeholders and support the execution of communication plans for relevant stakeholders
Progressive and Inclusive Workforce Policy Implementation	Support implementation and continuous feedback collection for workforce policies across diverse talent groups through technology tools and platforms

Beyond three years

With the ease of data access through cloud and automation technologies, the role will focus on generating data-driven insights for continuous improvement of learning and organisation development programmes. There will be an increased emphasis on implementing learning content through innovative and experiential technologies such as AR / VR to redefine the learning experience.

Chief Human Resource Officer

Job Family:

Human Resource

Impact level: Medium



The role will evolve to be:

- Value creator and future of work strategist to reimagine the way work gets done through optimal combination of humans and machines.
- Culture orchestrator to build a unifying workplace culture that fosters a sense of purpose and belonging for diverse groups of talent.
- Business advisor and coach, with strong ethical grounding in managing complexities.
- Leadership architect and people advocate to elevate the people agenda, build and develop leaders, anticipate future capabilities and drive continuous learning within the organisation.
- Innovator to push the traditional boundaries and develop fit for purpose HR operating models, enabled by integration of technology.
- Data science champion to drive use of decision science to shift from reporting to insights and predictive analytics.











EXPECTATIONS WITHIN THREE YEARS

Strategic value creator

The role will partner with business leaders to **identify future capabilities** required to shape the long-term business goals and **strategise the future of work**. The role will provide an outside-in perspective on the business environment by looking at the broader economic context, business shifts and competitor strategies, to translate those into talent implications. The role will **orchestrate new ways of working** through optimal human-machine collaborations, create meaningful jobs and **drive a culture of continuous learning** in the organisation.

Culture orchestrator

The role will **catalyse culture change** and create a culture that aligns with business strategy, organisation values and the new ways of working; leverage **behavioural drivers** to influence positive behaviour changes to foster a sense of purpose and belonging within the workforce.

Business coach

The role will be a **partner and coach for senior business leaders** and foster a growth mindset and innovation. The role will challenge leaders and provide **well-balanced advice** on key people-related decisions. The role will manage complex situations and multiple stakeholders with competing demands to effortlessly navigate and align expectations.

Leadership architect

The role will groom future leaders for the organisation and guide their development through a robust plan, along with other business leaders. The CHRO will pave the career journeys for key talent and identify opportunities for growth and learning.

People advocate and governance expert

The role will continuously assess internal people policies and decisions against the external market and legislations and recommend strategies to **elevate the people agenda**. The role will highlight potential implications of changing external landscape and legislations to recommend **strategies to future-proof the organisation**.

Chief Human Resource Officer

EXPECTATIONS WITHIN THREE YEARS

Technology evangelist

In future, the CHRO will engineer the **shift in the HR operating model towards a strategic solution design and business partnering**. The role will drive the vision for continuous upgrade of service delivery and experience by evaluating opportunities and **prioritising HR technology investments**. The role will influence business leaders through a robust business case that translates investments into performance outcomes and increased productivity for the business. The role will also drive the upskilling of HR teams to embrace technology.

Decision science champion

The role will **drive investments in infrastructure**, **systems and capability** within HR to enhance evidence-based thinking using decision science. The role will influence positive changes in behaviours through insights from social sciences, decision making and economics.

Future skills* (Role-specific)

Focus areas	Descriptions
Organisation Transformation	Drive organisation transformation strategies and programmes that impact organisation-wide structures, processes, behaviours, in alignment with business strategy, workforce trends and disruptive technologies and enhance organisational effectiveness and performance
Workplace Culture and Change Management Advisory	Drive strategies to achieve desired organisational culture by leveraging understanding of social drivers in the organisation and coach organisation leaders to lead change management across the organisation
Strategic Business and HR Advisory	Coach organisation leaders and provide data-driven insights on opportunities by leveraging data analytics to influence and align talent strategies to business needs
Talent Experience Management	Influence business decisions to drive a seamless and integrated talent experience that aligns with overall branding and consumer experience strategy of the organisation
Design Thinking	Influence development of talent programmes through human-centred strategies for enhanced talent experience
Behavioural Drivers	Provide thought leadership to drive application of behavioural levers to drive culture and workplace transformation
Sustainability and Digital Citizenship Governance	Foster an inclusive and ethical workplace culture that enables organisation to make a positive impact on the environment, community, society, and economy. Oversee the development of policies and guidelines for corporate and digital citizenship to safeguard business and talent.
Work Architecture and Job Redesign	Strategise work architecture by driving job redesign and lay the foundation for future workforce planning including the broader talent ecosystem
Learning and Development Strategy	Foster a continuous learning culture to drive upskilling and reskilling across diverse talent groups to meet current and future needs of the organisation

Chief Human Resource Officer

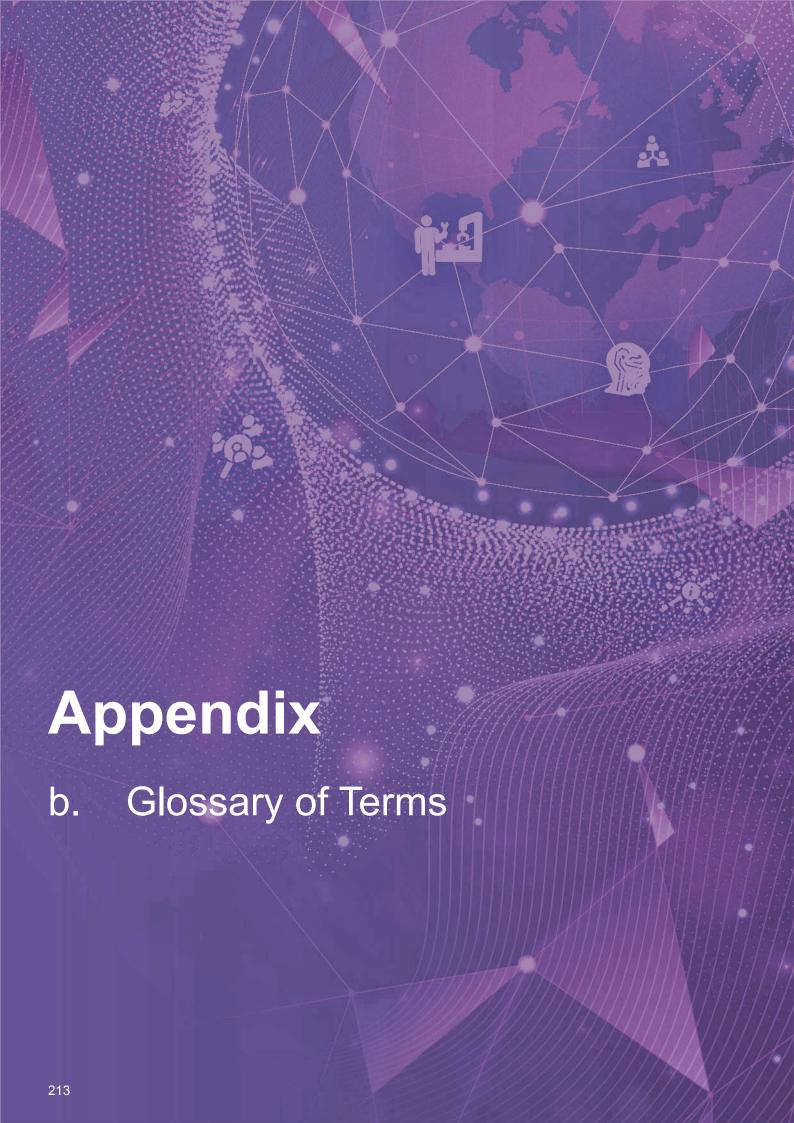
Future skills* for CHRO

* Note: Please refer to Skills Framework for HR for exhaustive list of skills required for the role

Focus areas	Descriptions
Business and Financial Acumen	Develop appropriate talent strategies by leveraging in-depth knowledge of business drivers, financial indicators, workforce analytics and the impact on workforce and financial performance. Consider key industry drivers and macro-economic trends when evaluating impact of talent strategies on workforce performance
Data-driven Story Telling	Guide the development of the business case and challenge business leaders through presentation of compelling narratives and data-based insights to secure buy-in for talent strategies and decisions
People Analytics	Strategise people analytics approach and tools (e.g. linkages of data metrics, analysis of intangible metrics and predictive modelling) to augment talent strategies and develop data-based talent programmes in the organisation
Organisational Behaviour and Change Management	Strategise organisational-level change and advocate use of technology to implement new change approaches such as real-time multidirectional engagement to influence desired change in individual and group behaviours
Agile Mindset	Develop strategies to drive agile ways of working as well as, structures and processes that allow speed and adaptability to react quickly to the changes in the external environment. Influence a mindset shift across the organisation to thrive and excel within a dynamic organisational culture
HR Technology Adoption	Provide thought leadership on HR service delivery model and technology integration that would elevate talent experience as well as drive the business and talent to attain organisational goals
Relationships and Communication	Pre-empt and proactively assess needs of diverse groups of stakeholders and develop communication strategy to continuously engage them, in order to attain desired outcomes
Progressive and Inclusive Workforce Policy Implementation	Provide advisory and obtain buy-in from the business on inclusive and diverse workforce policies based on data-driven insights through analysis of talent and business metrics as well as social elements (e.g. social responsibility, sustainability, D&I, etc.) to influence legislative changes across diverse talent groups

Beyond three years

The CHRO will continuously evolve the work and talent strategy to accelerate digital transformation for the business and HR and drive perpetual reinvention of work as technology becomes more sophisticated. The role will guide the leaders to navigate the potential conflict between the commercial mandate of the business and the impact of automation on the broader environment and communities. The increased prevalence of a broader talent ecosystem will drive the need for greater talent advocacy, and the role will ensure that inclusive and equitable policies, experiences and opportunities are available to all talent, including gig and contract workers. The role will also need to design higher-value jobs that allow talent to deliver meaningful work, aligned with the organisation's purpose. Finally, to help the business navigate the complexities of the changing landscape, the CHRO will continuously push the boundaries and provide alternate perspectives, drive the organisation towards the future by driving an agile mindset and culture throughout the organisation.



Glossary of Terms

Glossary of 1	eriis
Terms	Definition and Sources / Examples
Advanced data analytics	Advanced data analytics encompasses predictive analytics and modelling, including insights on linkages of talent metrics with business outcomes and analysis of intangible metrics such as reputation, sentiment etc. to provide deeper insights into patterns, trends, and themes that may be hidden within data.
Agile compensation framework	An agile compensation framework allows organisations to change compensation spending according to business needs, market needs as well as preferences of diverse talent groups across the broader talent ecosystem. It includes different elements of pay such as skills-based pay, incentive pay, and other allowances which can be offered to employees for greater personalisation and flexibility.
Agile organisation structure	An agile organisation structure is fluid and includes self-managed teams organised by projects and skills for problem solving and solution finding, unencumbered by formal role definitions or function / departmental boundaries. It is governed by alignment to organisational strategy and defined principles of accountability, transparency, and collaboration to easily adapt to future organisation needs.
Continuous listening	Continuous listening is defined as a means to gather continuous and real-time feedback from employees on different elements of the talent experience across the talent lifecycle, using surveys, technology applications and communication platforms such as census or pulse surveys, social data mining, digital ambient data mining and online hubs etc.
Continuous engagement	Continuous engagement relies on use of data-driven insights gathered through continuous listening to understand barriers to engagement and introduce initiatives as well as use of technology such as nudging etc. to regularly interact with talent and foster an environment that builds an enhanced and high performing employee experience.
Continuous A continuous performance management process is designed to allow on-going / mo feedback and appraisal. This process includes elements such as short-term goal set time feedback and regular one-on-one meetings for discussion on performance approximately.	
Data governance	Data governance is the specification of decision rights and an accountability framework to ensure the appropriate behaviour in the valuation, creation, consumption and control of data and analytics.
Diverse talent groups	Diverse talent groups are groups of individuals, including talent both within and outside the organisation, with a diverse range of demographic, social and personal characteristics and attributes including different thoughts, background, and experiences, such as such as age, gender, mental and physical capabilities, ethnicity etc.
Furloughs	Furloughs are mandatory temporary, unpaid leaves of absence that employees, such as temporary ceasing of work without pay, placed by employers due to financial hardships being faced by a company or the economy. Furloughs may be short or long term and can be complete or partial furloughs. Employees on furloughs may still receive their benefits coverage and will

be expected to return to their fulltime jobs eventually.

Glossary of To	
Terms	Definition and Sources / Examples
Half-life of skills	Half-life of skills refers to the period of time a skill is innovated, flourishes and then starts to lose its value and eventually becomes irrelevant. According to a research by World Economic Forum, the half-life of a professional skill is estimated to be 5 years, which means 5 years from now the current skill set of the workforce will be about half as valuable as it is today.
Intangible metrics	Intangible metrics are metrics and data that are hard-to-measure and hard-to-value. Examples of intangible metrics include talent sentiments, performance potential, learning effectiveness etc.
Machine Learning (ML)	Machine Learning (ML) is an application of artificial intelligence that provides systems with the ability to recognise patterns and automatically learn and improve from experience with minimal human intervention. The process of learning begins with observations or data, such as examples, direct experience, or instruction, in order to look for patterns in data and make better decisions in the future.
Multi-source listening / feedback	Multi-source listening / feedback refers to obtaining feedback and data from diverse range of sources such as business leaders, talent as well as internal and external technology and social media platforms.
Preboarding	Preboarding is a part of the onboarding process, is the period between offer acceptance and the first day of work. Organisations typically use this period to get information and set-up systems such as email and systems access, issuing equipment, setting-up salary account, insurance or other formalities etc., for the smooth joining of an employee. In addition to the formalities, it also focuses on welcoming a new hire and putting their mind at ease before they start working.
Onboarding	Onboarding is a process of integrating a new employee with a company and its culture, as well as getting a new hire the tools and information needed to become a productive member of the team. Organisations often define milestones for new hires and roles of responsibilities for all stakeholders (i.e. HR, Manager and employee) such as objectives for first day, first week, first month, first year etc.
Organisational network analysis	Organisational network analysis (ONA) is a structured way to evaluate formal and informal relationships within an organisation to help shape business strategy and initiatives for identifying and developing leaders and change management. It enables the visualisation of how communications, information, and decisions flow through an organisation. ONA allows leaders in an organisation to identify informal leaders, accelerate strategic change adoption and initiatives, and hence can be used as a measure of performance for leaders.
Personalised insights	Personalised insights provide an accurate and deep understanding of an individual's behaviour and needs. Examples include motivating factors, sense of belonging, and talent sentiments.
Programmatic job advertising	Programmatic job advertising publishes and optimises job advertisements to target job seekers on platforms where potential candidates with specific traits are active, using more detailed parameters. Programmatic job advertising helps with effective campaigns based on actual data,

reaching the right audience, and resulting in lowered costs and time-to-hire.

Terms	Definition and Sources / Examples
Pulse surveys	Pulse surveys are usually shorter surveys (often a dozen questions or fewer) and / or deployed to a subset of the overall employee population (e.g., a random sample across the company, or focused on employees in a specific business unit or functional area). Pulse surveys are often used to identify more specific, targeted and timely insights and the survey content can be more readily adjusted as needed.
Self-directed career progressions	Self-directed career progressions refer to talent taking full ownership of their own career to initiate dialogues with managers and manage own learning and development, and ultimately drive their career as per the desired pathways.
Self-service data and analytics	Self-service data and analytics is a form of business intelligence in which line managers are enabled and encouraged to perform queries and generate reports on their own with minimal support from HR or IT systems support teams.
Sentiment analysis	Sentiment analysis refers to an approach that gathers large volume of feedback (via emails, internal and external platforms) to capture, quantify, and measure talent perceptions and emotions with regards to the organisation or towards a new policy, change decisions, management practices or workplace culture.
Talent ecosystem	Talent ecosystem refers to a borderless world of talent acquisition and management with multiple sources of acquiring talent and consists of an extended and evolving series of relationships that go beyond the traditional talent pool and conventional employee-employer arrangements including borrowed talent, partnerships, freelance talent, and open source or crowdsourced talent etc.
Talent persona	Talent persona is a group of talent that have similar traits, experiences, and behaviours. These are usually developed through data gathered and analysed to develop clusters of similar profiles for the design of experiences tailored to meet their needs.
Tangible metrics	Tangible metrics are metrics and data that are clear and easily quantifiable. Examples of tangible metrics include pay and benefits, time to hire, cost per hire, and engagement ratings.
Total talent management strategy	Total talent management strategy is a talent workforce management strategy for diverse groups of talent across the broader talent ecosystem including, various contingent workers like gig workers, part-time employees, and project-based employees.
Workplace ergonomics	Workplace ergonomics is the study of designing the job and workplace to fit the worker, keeping in mind the capabilities, preferences and limitations of talent in order to eliminate factors that adversely affect worker health and comfort, in order to improve work performance and productivity.



Industry Participants

We would like to thank the following organisations for their participation in this study.

1.	6I COMMUNICATION PTE. LTD. (BEEKEEPER COMMUNICATIONS)	39.	BW MARITIME PTE. LTD.
2.	AADVANTAGE CONSULTING GROUP PTE. LTD.	40.	CADENCE GROUP PTE. LTD.
3.	ABERDEEN STANDARD INVESTMENTS (ASIA) LIMITED	41.	CAPGEMINI SINGAPORE PTE. LTD.
4.	ACCENTURE PTE LTD	42.	CAPITALAND SINGAPORE LIMITED
5.	ACCOR	43.	CARDINAL HEALTH SINGAPORE 225 PTE. LTD.
6.	ACCURON TECHNOLOGIES LIMITED	44.	CAREER TOUCHPOINT LLP
7.	ADM ASIA-PACIFIC TRADING PTE. LTD.	45.	CARGILL ASIA PACIFIC HOLDINGS PTE. LTD.
8.	AECOM ASIA (SINGAPORE) PTE. LTD.	46.	CBRE PTE. LTD.
9.	AGENCY FOR INTEGRATED CARE PTE. LTD.	47.	CERTIS CISCO SECURITY PTE. LTD.
10.	AIBEL PTE. LTD.	48.	CHANGI AIRPORT GROUP (SINGAPORE) PTE. LTD.
11.	AIMS ITERNATIONAL (SG) PRIVATE LIMITED	49.	CHANGI GENERAL HOSPITAL PTE LTD
12.	ALTAIR ENGINEERING INSPECTIONS PTE. LTD.	50.	CHARLES & KEITH (SINGAPORE) PTE. LTD.
13.	AMERICAN BILTRITE FAR EAST, INC.	51.	CHINA LIFE INSURANCE (SINGAPORE) PTE. LTD.
14.	AMOS GROUP LIMITED	52.	CIMB BANK BERHAD
15.	ANG MO KIO - THYE HUA KWAN HOSPITAL LTD.	53.	CIRCLES LIFE ASIA TECHNOLOGY PTE. LTD.
16.	ANGLISS SINGAPORE PTE LTD	54.	CITIBANK SINGAPORE LIMITED
17.	ANTICS HOLDINGS PTE. LTD.	55.	CIVIL SERVICE COLLEGE
18.	ARBORLEAF PTE. LTD.	56.	COCA-COLA SINGAPORE BEVERAGES PTE. LTD.
19.	ARCHROMA SINGAPORE, PTE. LTD.	57.	CO-CREATE TOMORROW PTE. LTD.
20.	ARCLAB PTE. LTD.	58.	COLD STORAGE SINGAPORE (1983) PTE LTD
21.	ARINC INCORPORATED	59.	COLT TECHNOLOGY SERVICES SINGAPORE
22.	ASM PACIFIC INTERNATIONAL PTE. LTD.	60.	COMFORTDELGRO CORPORATION LIMITED
23.	AUSTRALIA AND NEW ZEALAND BANKING GROUP LIMITED	61.	COMO HOTELS & RESORTS (ASIA) PTE. LTD.
24.	AVIATION TRADING & SERVICES PTE. LTD.	62.	CORNERSTONE ONDEMAND SINGAPORE PTE. LTD.
25.	AVIVA LTD	63.	CREDIT INDUSTRIEL ET COMMERCIAL
26.	AZALEA ASSET MANAGEMENT PTE. LTD.	64.	CRIMSONLOGIC PTE LTD
27.	BANDAI NAMCO SINGAPORE PTE. LTD.	65.	CUSJO
28.	BANK OF COMMUNICATIONS CO., LTD	66.	DAIRY FARM INTERNATIONAL HOLDINGS LIMITED
29.	BEACH HOUSE PICTURES PTE. LTD.	67.	DAISO SINGAPORE PTE. LTD.
30.	BELFOR (Asia) Pte Ltd	68.	DBS BANK LTD.
31.	BIGL ASIA PTE. LTD.	69.	DCH AURIGA SINGAPORE
32.	BIO-RAD LABORATORIES (SINGAPORE) PTE LTD	70.	DEFENCE SCIENCE AND TECHNOLOGY AGENCY
33.	BLACK & VEATCH (SEA) PTE. LTD.	71.	DELPHI SINGAPORE HOLDINGS PTE. LTD.
34.	BLUDOTASIA ENGINEERING PTE. LTD.	72.	DENTSPLY SIRONA SINGAPORE PTE. LTD.
35.	BOMBARDIER (SINGAPORE) PTE LTD	73.	DENTSU AEGIS NETWORK ASIA PACIFIC PTE. LTD.
36.	BOYD & MOORE EXECUTIVE SEARCH PTE. LTD.	74.	DHL EXPRESS (SINGAPORE) PTE. LTD.
37.	BREADTALK GROUP LIMITED	75.	DOLE ASIA HOLDINGS PTE. LTD.
38.	BRENNTAG ASIA PACIFIC PTE. LTD.	76.	DOVER PARK HOSPICE

Appendix | c. Industry Participants

77.	ECOLAB PTE. LTD.	120.	HOTELBEDS PTE. LTD
79.	EM SERVICES PTE LTD ENGAGEROCKET PTE. LTD.	121.	HOUSING AND DEVELOPMENT BOARD
80.	ENGIS ASIA PACIFIC PTE. LTD.	122.	HR CONNECTUS PTE. LTD.
81.	EPITOME GLOBAL PTE. LTD.	123.	HUMAN LINK ASIA PTE. LTD.
82.	ESSENCE	124.	HUNET PTE. LTD.
83.	ESSILOR AMERA INVESTMENT PTE. LTD.	125.	HYUNDAI MOTOR INDIA LIMITED
84.	ETONHOUSE INTERNATIONAL EDUCATION GROUP PTE. LTD.	126.	IFS (SINGAPORE) PTE. LTD.
85.	EU YAN SANG INTERNATIONAL LTD	127.	IFS SOLUTIONS ASIA PACIFIC PTE LTD
86.	EXCELCO EQUIPMENT PTE LTD	128.	IGT FAR EAST PTE. LTD.
87.	EXYTE SINGAPORE PTE. LTD.	129.	IHH HEALTHCARE BERHAD
88.	FAR EAST ORGANIZATION PTE. LTD.	130.	IKIGAI ENABLERS PTE. LTD.
89.	FIBER REACH PTE. LTD.	131.	INDIA INTERNATIONAL INSURANCE PTE LTD
90.	FITCH RATINGS SINGAPORE PTE. LTD.	132.	INFORMATICS EDUCATION LTD.
91.	FLOWSERVE PTE LTD	133.	INTERVIEWER.AI PTE. LTD.
92.	FOUR POINTS BY SHERATON	134.	INVESCO ASIA PACIFIC
93.	FPG MANAGEMENT SERVICES PTE. LTD.	135.	IPSOS PTE.LTD.
94.	FRANKLIN TEMPLETON CAPITAL HOLDINGS PRIVATE LIMITED	136.	JOBABLE
95.	FRASER AND NEAVE, LIMITED	137.	JOBKRED PRIVATE LIMITED
96.	FREELANCE TOTAL REWARDS PTE. LTD.	138.	JOHNSON CONTROLS (S) PTE.LTD.
97.	FUJI XEROX SINGAPORE PTE LTD	139.	JTC CORPORATION
98.	GE AVIATION, ENGINE SERVICES - SINGAPORE PTE. LTD.	140.	JURONG PORT PTE LTD
99.	GE POWER (SINGAPORE) PTE. LTD.	141.	JUSTCO HOLDINGS PTE. LTD.
100.	GENERAL ELECTRIC INTERNATIONAL, INC.	142.	KEPPEL CAPITAL INTERNATIONAL PTE. LTD.
101.	GKE CORPORATION LIMITED	143.	KEPPEL CORPORATION LIMITED
102.	GNOWBE PTE. LTD.	144.	KEPPEL INFRASTUCTURE HOLDINGS PTE. LTD.
103.	GOLDTECH RESOURCES PTE LTD	145.	KEPPEL LAND INTERNATIONAL (MANAGEMENT) PTE. LTD.
104.	GOVERNMENT TECHNOLOGY AGENCY	146.	KEPPEL PEOPLE SERVICES PTE. LTD.
105.	GRABTAXI HOLDINGS PTE. LTD.	147.	KFC ASIA FRANCHISE PTE. LTD.
106.	GRAPHISOFT ASIA LIMITED	148.	KPISOFT INTERNATIONAL PTE. LTD.
107.	HAMWORTHY PUMPS SINGAPORE PTE. LTD.	149.	LASALLE COLLEGE OF THE ARTS LIMITED
108.	HANWELL HOLDINGS LIMITED	150.	LASELLE INVESTMENT MANAGEMENT ASIA PTE LTD
109.	HARMAN SINGAPORE PTE. LTD.	151.	LIBERTY INSURANCE PTE. LTD.
110.	HIROSE ELECTRIC SINGAPORE PTE. LTD.	152.	LUYE MEDICAL GROUP PTE. LTD.
111.	HITACHI ASIA LTD.	153.	M1 LIMITED
112.	HITACHI CONSTRUCTION MACHINERY ASIA AND PACIFIC PTE. LTD.	154.	MAJILIS UGAMA ISLAM, SINGAPURA
113.	HITACHI CONSULTING ASIA PACIFIC PTE. LTD.	155.	MANDAI PARK HOLDINGS PTE. LTD.
114.	HKBN JOS(SINGAPORE) PTE.LTD.	156.	MATCHMOVE PAY PTE. LTD.
115.	HO LEE CONSTRUCTION PTE LTD	157.	MCC LAND (SINGAPORE) PTE LTD
116.	HOME NURSING FOUNDATION	158.	MCGRAW-HILL EDUCATION (ASIA)
117.	HOME TEAM ACADEMY	159.	MEDIACORP PTE. LTD.
118.	HORIBA INSTRUMENTS (SINGAPORE) PTE LTD	160.	MEDNEFITS PTE. LTD.
119.	HOTEL G SINGAPORE	161.	MERCK PTE. LTD.
		162.	MERLIN ENTERTAINMENTS SINGAPORE PTE. LTD.
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163.	MIDEA ELECTRIC TRADING (SINGAPORE) CO. PTE. LTD.	206.	NATIONAL SKIN CENTRE (SINGAPORE) PTE LTD
164.	MINISTRY OF DEFENCE	207.	NATIONAL UNIVERSITY HOSPITAL (SINGAPORE) PTE LTD
165.	MINISTRY OF FINANCE	208.	NATIONAL UNIVERSITY OF SINGAPORE
166.	MINISTRY OF HEALTH	209.	NATSTEEL ASIA PTE. LTD
167.	MITSUBISHI CORPORATION	210.	NCS PTE. LTD.
168.	MIZUHO BANK, LTD.	211.	NESTE ENGINEERING SOLUTIONS PTE. LTD.
169.	MOH HOLDINGS PTE LTD	212.	NETLINK NBN MANAGEMENT PTE. LTD.
170.	MONDELEZ INTERNATIONAL AMEA PTE. LTD.	213.	NEWTON NOBLE PROPERTIES PTE. LTD.
171.	MOTOROLA SOLUTIONS SINGAPORE PTE. LTD.	214.	NGA HUMAN RESOURCES
172.	MSIG HOLDINGS (ASIA) PTE. LTD	215.	NGEE ANN POLYTECHNIC
173.	MUNICH REINSURANCE COMPANY	216.	NIPPON PAINT (SINGAPORE) COMPANY PRIVATE LIMITED
174.	NANYANG POLYTECHNIC	217.	NOVARTIS SINGAPORE PHARMACEUTICAL MANUFACTURING
175.	NANYANG TECHNOLOGICAL UNIVERSITY		PTE. LTD.
176.	NATIONAL ARTS COUNCIL	218.	NTEGRATOR PTE LTD
177.	NATIONAL COUNCIL OF SOCIAL SERVICE	219.	NTT SINGAPORE SOLUTIONS PTE. LTD.
178.	NATIONAL ENVIROMENT AGENCY	220.	NTUC ENTERPRISE CO-OPERATIVE LTD
179.	NATIONAL HERITAGE BOARD	221.	NTUC FAIRPRICE CO-OPERATIVE LTD
180.	NATIONAL SKIN CENTRE (SINGAPORE) PTE LTD	222.	NTUC FIRST CAMPUS CO-OPERATIVE LIMITED
181.	NATIONAL UNIVERSITY HOSPITAL (SINGAPORE) PTE LTD	223.	NTUC INCOME INSURANCE CO-OPERATIVE LTD
182.	NATIONAL UNIVERSITY OF SINGAPORE	224.	NUS YONG LOO LIN SCHOOL OF MEDICINE
183.	NATSTEEL ASIA PTE. LTD	225.	QAF LIMITED
184.	NCS PTE. LTD.	226.	QATAR NATIONAL BANK (Q.P.S.C.)
185.	NESTE ENGINEERING SOLUTIONS PTE. LTD	227.	RAFFLES HOTEL SINGAPORE
186.	NETLINK NBN MANAGEMENT PTE. LTD.	228.	RAFFLES QUAY ASSET MANAGEMENT PTE LTD
187.	NEWTON NOBLE PROPERTIES PTE. LTD.	229.	REALTEK SINGAPORE PRIVATE LIMITED
188.	NGA HUMAN RESOURCES	230.	REFINITIV ASIA PTE. LTD.
189.	NGEE ANN POLYTECHNIC	231.	RESMED ASIA PTE. LTD.
190.	MINISTRY OF DEFENCE	232.	ROHDE & SCHWARZ ASIA PTE. LTD.
191.	MINISTRY OF FINANCE	233.	ROYAL DSM
192.	MINISTRY OF HEALTH	234.	RYDER-ASCENT LOGISTICS PTE LTD
193.	MITSUBISHI CORPORATION	235.	SALVATION ARMY, THE
194.	MIZUHO BANK, LTD.	236.	SANMINA-SCI SYSTEMS SINGAPORE PTE. LTD.
195.	MOH HOLDINGS PTE LTD	237.	SANOFI-AVENTIS SINGAPORE PTE. LTD.
196.	MONDELEZ INTERNATIONAL AMEA PTE. LTD.	238.	SAP ASIA PTE. LTD.
197.	MOTOROLA SOLUTIONS SINGAPORE PTE. LTD.	239.	SATS LIMITED
198.	MSIG HOLDINGS (ASIA) PTE. LTD	240.	SAVITAR PTE. LTD.
199.	MUNICH REINSURANCE COMPANY	241.	SCHENKER (ASIA PACIFIC) PTE LTD
200.	NANYANG POLYTECHNIC	242.	SCHENKER SINGAPORE (PTE) LTD
201.	NANYANG TECHNOLOGICAL UNIVERSITY	243.	SCHNEIDER ELECTRIC ASIA PTE. LTD.
202.	NATIONAL ARTS COUNCIL	244.	SEMBCORP INDUSTRIES SINGAPORE
203.	NATIONAL COUNCIL OF SOCIAL SERVICE	245.	SEMBCORP MARINE CONTRACTORS PTE. LTD.
204.	NATIONAL ENVIROMENT AGENCY	246.	SENGKANG GENERAL HOSPITAL PTE. LTD.
205.	NATIONAL HERITAGE BOARD	247.	SGTECH CONSULTANCY PTE. LTD.

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248.	SHANGHAI TUNNEL ENGINEERING CO. LTD.	289.	T&T SALVAGE ASIA, PTE. LTD.
249.	SHREE RAMKRISHNA EXPORTS PVT. LTD.	290.	TAES DESIGN PTE. LTD.
250.	SIA ENGINEERING COMPANY LIMITED	291.	TAIYO NIPPON SANSO HOLDINGS SINGAPORE PTE. LTD.
251.	SIGITECH HOLDINGS PTE. LTD.	292.	TANGLIN CLUB
252.	SILVERLAKE (SG) PTE. LTD.	293.	TANGLIN TRUST SCHOOL LIMITED
253.	SINGAPORE ACADEMY OF LAW	294.	TASTER FOOD PTE. LTD.
254.	SINGAPORE AIRLINES LIMITED	295.	TEAMIE PTE. LTD.
255.	SINGAPORE COMPUTER SOCIETY	296.	THALES ASIA PTE. LTD.
256.	SINGAPORE CORPORATION OF REHABILITATIVE ENTERPRISE	297.	THALES DIS (SINGAPORE) PTE. LTD.
257.	SINGAPORE CUSTOMS	298.	THE LO AND BEHOLD GROUP PTE. LTD.
258.	SINGAPORE EXCHANGE LIMITED	299.	THE MISSION MARKETING GROUP
259.	SINGAPORE HUMAN RESOURCES INSTITUTE (SHRI)	300.	THE PILATES WORKS
260.	SINGAPORE LNG CORPORATION PTE. LTD.	301.	THE ULTIMATE PTE. LTD.
261.	SINGAPORE MANUFACTURING FEDERATION	302.	TSAO FOUNDATION
262.	SINGAPORE O&G LTD	303.	TURNER & TOWNSEND PTE. LIMITED
263.	SINGAPORE POLYTECHNIC	304.	TWITTER ASIA PACIFIC PTE. LTD.
264.	SINGAPORE POOLS (PRIVATE) LIMITED.	305.	UA SPORTS (S.E.A.) PTE. LTD.
265.	SINGAPORE POWER LIMITED	306.	UBS AG
266.	SINGAPORE PRESS HOLDINGS LIMITED	307.	UBTS PTE LTD
267.	SINGAPORE TELECOMMUNICATIONS LIMITED	308.	UE PARK AVENUE INTERNATIONAL PTE. LTD.
268.	SINGAPORE UNIVERSITY OF TECHNOLOGY AND DESIGN	309.	ULTIMATE DISPLAY SYSTEM PTE LTD
269.	SINGAPORE-MIT ALLIANCE FOR RESEARCH AND	310.	UNIGOLD INTERNATIONAL PTE. LTD.
270	TECHNOLOGY CENTRE SPOTMENTOR TECHNOLOGIES DIE LID	311.	UNITED OVERSEAS BANK LIMITED
270. 271.	SPOTMENTOR TECHNOLOGIES PTE. LTD. SSAB SWEDISH STEEL PTE LTD	312.	UPS ASIA GROUP PTE. LTD.
271.	ST ANDREW'S MISSION HOSPITAL	313.	VENA ENERGY PTE. LTD.
		314.	VERTIV (SINGAPORE) PTE. LTD.
273.	STANDARD CHARTERED BANK (SINCARORE) LIMITED	315.	VISTRA CORPORATE SERVICES (SEA) PTE. LTD.
274.	STANDARD CHARTERED BANK (SINGAPORE) LIMITED	316.	VITAL SHARED SERVICES
275.	STARHUB LTD.	317.	WARGAMING ASIA PTE. LTD.
276.	STOLT-NIELSEN SINGAPORE PTE. LTD.	318.	WAVIN SINGAPORE HOLDING PTE. LTD.
277.	STRACO LEISURE PTE. LTD.	319.	WILLIAMS-SONOMA SINGAPORE PTE. LTD.
278.	SUBSEA 7 SERVICES (SINGAPORE) PTE. LTD.	320.	WORKDAY SINGAPORE PTE. LTD.
279.	SUMITOMO CHEMICAL ENGINEERING SINGAPORE PTE. LTD.	321.	XMI PTE. LTD.
280.	SUMITOMO CORPORATION ASIA & OCEANIA PTE. LTD.	322.	YAMADA CONSULTING GROUP CO., LTD. SINGAPORE BRANCH
281.	SUMITOMO MITSUI BANKING CORPORATION SINGAPORE BRANCH	323.	YANG KEE LOGISTICS (SINGAPORE) PTE. LTD.
282.	SUNTEC SINGAPORE INT'L CONVENTION & EXHIBITION CENTRE	324.	YANMAR INTERNATIONAL SINGAPORE PTE. LTD.
283.	SURBANA JURONG PRIVATE LIMITED	325.	YEO HIAP SENG LTD
284.	SWISS RE INTERNATIONAL SE SINGAPORE BRANCH	326.	YHI CORPORATION (SINGAPORE) PTE LTD
285.	SYNERGITA SOFTWARE PRIVATE LIMITED	327.	YOKOGAWA ENGINEERING ASIA PTE LTD
286.	SYNGENTA ASIA PACIFIC PTE. LTD.	328.	YOUNG MEN'S CHRISTIAN ASSOCIATION OF SINGAPORE
287.	SYNPULSE SINGAPORE PTE. LTD.	329.	ZENDESK SINGAPORE PTE. LTD.
288.	T&L SUPPORT SERVICES PTE. LTD.		

About IHRP

The Institute for Human Resource Professionals (IHRP) is set up by the tripartite partners: the Ministry of Manpower (MOM), the National Trades Union Congress (NTUC) and Singapore National Employers Federation (SNEF) to professionalise and strengthen the HR practice in Singapore.

IHRP has the goal of setting the HR standards of excellence, developing HR as a strategic enabler of business and workforce transformation and fostering a vibrant HR services eco-system to drive innovation and change. Through the IHRP Certification and other national programmes, IHRP aims to enhance the competencies of HR professionals, as well as create developmental and professional pathways for them. This will professionalise and strengthen the HR practice in Singapore, allowing HR professionals to be key enablers in their organisations.