

7.2.1 Job Dashboards

Production Manager/Assistant Production Manager

Megatrends impacting the Job Role in Short to Medium-Term

COVID-19	Multi-Skilling	Sustainable Construction/Buildings	Value Chain Aggregation & Integration	Workforce Challenges
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Technology Trends impacting the Job Role in Short to Medium-Term

BIM Technology	Data Analytics & AI	Digital Twin	Remote Monitoring
RPA	Robots & Automation	VR/AR	5G, IoT & Smart Buildings
Innovative Building Materials	Modular Construction	3D Printing	

Impact Assessment

M

MEDIUM

degree of change in tasks

Today

This job role is responsible for managing all technical aspects of the factory site and keeping track of resource requirements. Job holders also plan the sequence of events from production to bringing the module from the factory to the construction site, and is expected to coordinate the crew, supplies, and equipment.

In the Future

This job role may **leverage technology to enhance the management of the factory site** in automating calculations, estimations and planning tasks, and enhance the accuracy of tracking resource requirements. Job holders will need an **understanding and ability of technology application**, so as to **deliver production in adherence to time, cost and quality**, and may see **growing emphasis on keeping abreast of trends and technologies to assess viability of continuous improvement initiatives**.

Job Tasks Today	Impact at Task-level / Future view of Job Tasks	Time Horizon
Conduct production planning and logistics	<div>M</div> <ul style="list-style-type: none">Job holders may need to be familiar with digital platforms (e.g., BIM Technology) used for the storage and communication of specifications, shop drawings and job orders documents, so as to effectively review them.Job holders may need to interpret machine monitoring data enabled by digital tools (e.g., IoT) to supervise timely conduct of maintenance activities.Job holders may leverage digital communication tools to conduct review meetings and communications with relevant stakeholders.	Medium-term
	<div>H</div> <ul style="list-style-type: none">Digital tools (e.g., Data Analytics & AI, RPA) may automate calculations of labour and equipment requirements, and production estimates and outputs. RPA can also be leveraged to draft logistics schedules in alignment with output production and delivery time.Job holders will thus need capabilities to utilise these digital tools so as to develop variations of outputs based on potential change in production needs.Job holders may see a shift in focus towards stakeholder management and machine maintenance tasks.	Short-term

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Job Tasks Today	Impact at Task-level / Future view of Job Tasks		Time Horizon
Assess factory production	M	<ul style="list-style-type: none"> Job holders may leverage digital tools (e.g., Data Analytics & AI) to optimise planning of storage space, logistic arrangement and transportation of deliverables, and manpower allocation. Job holders may need to be equipped with the capabilities to utilise these digital tools and interpret data insights for improved efficacy. 	Short-term
	M	<ul style="list-style-type: none"> Job holders may also leverage digital tools for monitoring factory operations (e.g., IoT sensors) to monitor for production faults and allow for timely investigations. 	Medium-term
	M	<ul style="list-style-type: none"> Technology trends (e.g., Robots and Automation) may be leveraged to augment manpower planning for improved efficacy. Job holders will need to understand application of such technology to optimise manpower planning. 	Medium-term
Gather data for and assess viability of proposed continuous improvement initiatives	M	<ul style="list-style-type: none"> The use of digital tools for monitoring may also facilitate the gathering of data for time and cost management improvement plans. Job holders may need to have capabilities to interpret and translate the collected data into the plans. Digital tools (e.g., Data Analytics & AI) may augment the viability assessment of continuous improvement initiatives. Job holders will thus need capabilities to apply these digital tools in their assessment, to understand their impact on assessment outcomes. 	Medium-term
Ensure safety and sustainability standards	L	<ul style="list-style-type: none"> Job holders may need to be aware of latest trends (e.g., sustainable construction, modular construction) and its impact on organisational environmental sustainability and green building standards and guidelines. 	Short-term
	M	<ul style="list-style-type: none"> Job holders will continue to facilitate inspections and ensure compliance with safety policies and practices, and may leverage digital tools (e.g., remote monitoring) to perform these inspections. 	Short-term

The following TSCs/CCSs have been identified as in-demand/emerging for the job role going forward:

In-demand Technical Skills and Competencies		
Automated Process Design	Common Data Environment Management	Process Improvement and Optimisation
Robotic and Automation Technology Application	Technology Application	Technology Scanning
Emerging Technical Skills and Competencies		
Critical Thinking	Stakeholder Management	
Emerging Critical Core Skills		
Digital Fluency	Transdisciplinary Thinking	