

Hi! I am Michelle and I work as a Warehouse Operations Manager.

I leverage on big data analytics and key metrics to oversee the daily warehouse management activities, implementing automation among repetitive processes.





Level of Impact

MEDIUM

Time Horizon

Immediate

Mid-term

Long-term

Key Trends driving Impact



New Retail Model





Future-proofed Supply Chain

Highly Impacted Retail Archetypes

Supermarkets & Convenience Stores

Jewellery & Timepieces

Furniture & Household



DETAILED LOOK INTO IMPACT ON THE ROLE

	tegory of Impact	Types of impact to the role
	Technology Implementation	Displacement by Technology
		Augmented by Technology: Role shifts towards performing monitoring activities such as tracking and analysing productivity metrics (e.g. inventory turnover, costs).
		Complemented by Technology
	Job Reconfiguration	Job Enlargement
		Job Enrichment: Role is complemented by daily insights that allow he/she to review and drive effective warehouse operations practices

Skills to Grow

Warehouse Automation Application

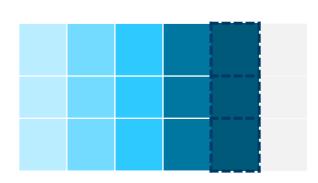
Proficiency level 5

Warehouse Space Utilisation

Proficiency level 5

Warehouse Performance Measurement

Proficiency level 5



New Skills Required



Automated Inventory Control



Environmental Protection Management



Transport Management System Administration

While the skill level remains, the Warehouse Operations Manager will be increasingly expected to apply these skills in their role:

- Warehouse Automation Application: Manage and drive the innovation of warehouses services, harmonising technology with warehouse operations.
- Warehouse Space Utilisation: Manage varying volumes of product due to different warehousing solutions, ensuring the warehouse spaces are managed efficiently
- **Warehouse Performance Measurement:** Identify key performance indicators in warehouses for optimal processes and customer relations activities, to improve efficiency, customer satisfaction and overall reduce costs for the business.

^{*}Skills and proficiency levels are identified based on Skills Framework for Logistics

Alternative titles: Logistics Operations Manager, Supply Chain Manage



THE ROLE TODAY

This job is responsible for managing and reviewing warehouse operational policies, standards and procedures including the implementation of warehousing solutions, in accordance to warehousing business and customers' needs. Job roles and responsibilities also include managing warehousing business resources, including manpower, internal assets and external vendors.

THE ROLE TOMORROW



In the longer-term, this role will play a more critical function in strategising datadriven solutions and providing impactful business advisory. The rise in emerging technologies will benefit the performance of these professionals by managing and optimising warehouse management activities, allowing them to focus their time and effort on scaling up the business' logistical processes using big data analytics.

Changes in critical work function

Critical Work Function	Key Drivers of Change	Implications on Tasks
Drive Business Continuous Improvement	Availability of large volume of data embedded in logistics operations: One of the most underutilised assets in the logistic industry is the high volume of supply chain data that can be analysed to recommend process re-engineering and other technology enhancements to improve warehouse operations efficiency. Expectations for sustainable practices: Consumers are starting to demand socially conscious and environmentally sustainable businesses.	 Job Enrichment: The Warehouse Operations Manager will shift from managing day-to-day operations work, to reviewing and identifying ways to enhance logistics performance with greater focus on reducing social and environmental impact for the tasks undertaken. This is complemented by applying data insights to review and drive effective warehouse operations practices, such as accurate forecasting of warehouse capacity, assessing potential delays and mitigating supply chain risks.

Critical Work Function	Key Drivers of Change	Implications on Tasks
Drive Warehouse Operations	 Integrating technology solutions to warehouse operations to optimise efficiency and guide decision making: Artificial Intelligence and Machine Learning to enhance on-demand capacity planning. Robotic Process Automation (RPA) such as tracking and sensors to enable real-time tracking of shipments and minimise potential supply chain risks. Autonomous Robots can replace manpower-intensive tasks that are tedious and repetitive, improving overall productivity. Constantly evolving consumer demand and integrated sales channels: There is a multitude of sales channels available for consumers to interact with, driving complex sales and return processes. Additionally, consumers have higher expectations for convenient and free returns policy. 	 As smart warehouses are integrated with automation, it will replace repetitive tasks and reduce human errors. The Warehouse Operations Manager will have to shift towards performing monitoring activities such as tracking and analysing productivity metrics (e.g. inventory turnover, costs), driving improvement plans in warehouse operations performance. The Warehouse Operations Manager will have to manage multiple schedules for inbound and outbound delivery, as supply chains and fulfilment activities are increasingly diversified. The Warehouse Operations Manager will have to collaborate with the Retail Operations, Merchandising and E-commerce teams to determine accurate forecasts of consumer demand. These predictions will serve to inform the Warehouse Operations Manager on making advanced procurement orders for specific products. The Warehouse Operations Manager will also have to monitor real-time e-commerce and retail sales, to ensure stores are replenished sufficiently to meet consumer demand. The Warehouse Operations Manager has to manage activities and cost implications of processing returns and organising the circular flow of inventory.

Critical Work Function	Key Drivers of Change	Implications on Tasks
Drive Cargo/ Material Handling & Delivery Operations	As retailers shift towards e-commerce, there is a need to offer faster and more reliable last-mile delivery by working with external logistics partners (e.g., 3PLs) or build their own capabilities by reviewing operational capabilities and/or taking advantage of technologies.	 As retailers provide customers with more sales fulfilment options, the Warehouse Operations Manager will be expected to manage fulfilment across the channels (e.g. e-commerce, retail stores and q-commerce) and maintain satisfactory customer experience. The Warehouse Operations Manager has to ensure inventory management and delivery operations are fulfilled in an accurate and timely manner. This includes streamlining the procurement of products, automating inventory management and providing real-time updates on delivery. The focus will shift to the constant flow of information and data that enable transparency for consumer, and easy optimisation and adaptation of processes. The Warehouse Manager will also be more focused on developing partnerships and collaborations with other logistics partners as the focus shifts to continuous evolution and responsiveness to consumer demands.

A closer look at how tasks would be impacted:

Critical Work Function	Existing task	Envisioning the new tasks
Drive Business Continuous Improvement	Review business processes improvement solutions to determine effectiveness	 Evaluate processes and data insights to identify opportunities to implement innovative practice or technology, which improve efficiency and reliability of logistics operations. Review existing processes and practices to identify opportunities in reducing social and environmental impact, sharing quantifiable impact insights.
Drive Warehouse	Determine warehouse storage system strategy using knowledge of changes in conditions, operations and the environment and its impact to outcomes	Develop real-time warehouse operations to deliver logistics services that fulfil customer demands across multiple sales channels and are responsive to evolving consumer demands or external circumstances.
Operations	Review warehouse strategy for alignment across different functions	Review warehouse strategy across functions, delivery services and returns policies for the multiple sales channels to maintain service levels and consider ultimate impacts on the customer experience.
Drive Cargo/ Material Handling & Delivery Operations	Manage resources to ensure cargo-handling schedules are met	 Implement warehousing capabilities to meet dynamic schedules across different inbound delivery stakeholders. Manage outbound delivery operations to optimise multichannel fulfilment process and elevate the customer experience.

Upskilling of existing skills





- Warehouse Space Utilisation
- Warehouse Performance Measurement

New skills for the role



- Automated Inventory Control[^]
- Environmental Protection Management
- **Transport Management System** Administration

^Skills not in any Skills Framework