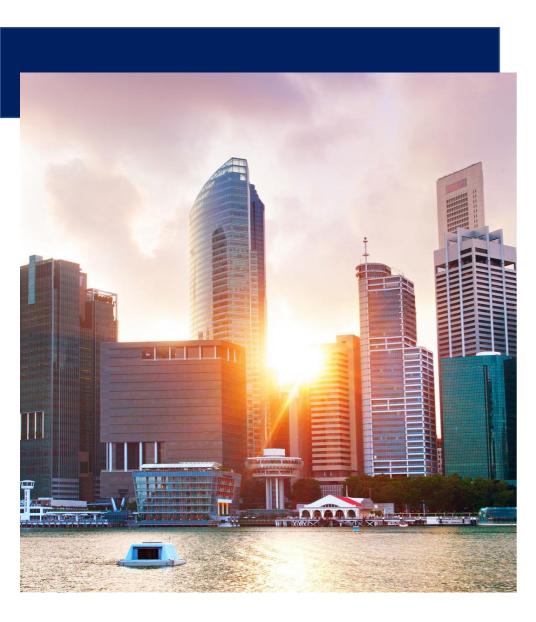


Singapore Supply Chain Management (SCM) Skills Plan

Co-developed by







Objective of SCM Skills Plan

The SCM Skills Plan is a reflection of the Singapore Government's broader commitment and long-term efforts to continually invest and to support in the upskilling of Singapore's supply chain workforce. The Skills Plan seeks to promote lifelong learning and to inspire Singapore's SCM workforce to strive towards SCM skills mastery.

- The **one-stop reference guide on SCM jobs and skills,** aims to equip stakeholders, such as companies' in-house training teams, schools, and training providers, with information on trends that will reshape SCM job scope and to raise awareness on in-demand skillsets that SCM practitioners need to acquire to remain relevant and competitive.
- It provides jobs and skills insights to guide training providers in curriculum development, help enterprises in the enhancement of their in-house SCM training programmes, and provide individuals with information to upskill and reskill to take on good jobs in SCM.

Pillars of the SCM Skills Plan

Pillar 1

Information on SCM and its key functions

What is it about?

Importance of SCM and the significance of the Planning, Sourcing & Procurement (S&P) functions.

How does it help you?

To develop and strengthen SCM workforce, particularly in Planning, and S&P functions.

Pillar 2

SCM trends and impact on the job roles under Planning and Sourcing & Procurement functions

What is it about? Upcoming growth and opportunities in Planning and S&P functions. Trends that impact SCM job roles and skills.

How does it help you?

To understand and prepare SCM workforce with key skills based on how trends are impacting and reshaping SCM job roles.

Pillar 3

SCM job roles and skills required

What is it about? SCM job roles' key tasks and skills required in Planning, and S&P functions.

How does it help you?

To inform on the SCM job roles' key tasks, and the required apps & tools, technical and critical core (soft) skills. Pillar 4 Skills activation plan

What is it about? Training interventions to reskill and upskill the workforce to take on the SCM job roles.

How does it help you?

To inform on initiatives that reskill and upskill the workforce to enable them to acquire key skills and take on SCM job roles.

Pillar 1 – Information on SCM and its key functions

Supply chain management (SCM) forms an integral part of businesses and is essential to a company's success and ensuring customer satisfaction. Every industry has its own supply chain network comprising cross-border supply chains, and a well-organized supply chain aims to enable a steady and resilient flow of goods, improve efficiency, reduce cost, and increase profitability. SCM functions oversee the full span of activities from sourcing to production planning, to delivery and aftermarket service. It typically comprises five main functions:

- 1. Supply Chain Planning;
- 2. Sourcing & Procurement;
- 3. Manufacturing & Operations;
- 4. Distribution & Logistics; and
- 5. Supporting Enablers.

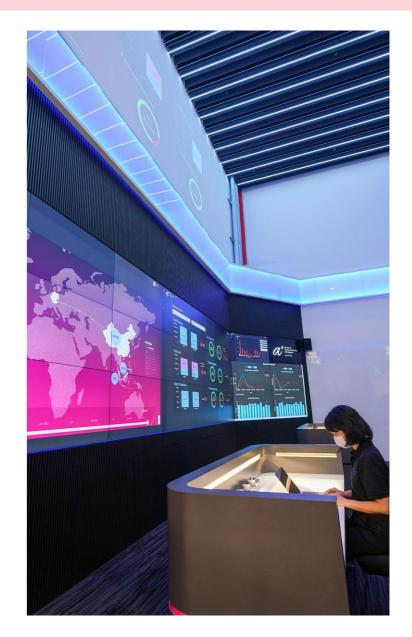
The five SCM functions reside within manufacturers and brand owners, and they include job roles that oversee logistics management to support physical fulfilment of goods, such as inbound and outbound transportation, fleet management, warehousing, and the management of third-party logistics service providers*.

Singapore currently has around 70,000 SCM professionals across both manufacturing and non-manufacturing industries such as food and beverage, wholesale, and retail trade.

Pillar 1 – Information on SCM and its key functions

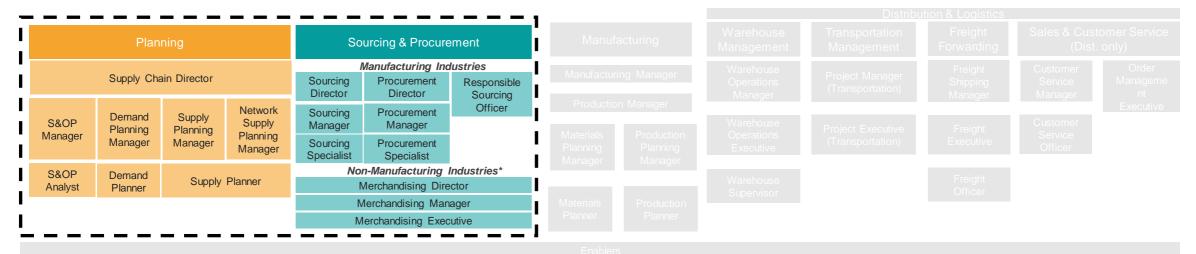
The Skills Plan will focus on two out of the five SCM functions – namely **Supply Chain Planning, and Sourcing & Procurement (S&P)**.

- 1. With the increasingly Volatile, Uncertain, Complex and Ambiguous (VUCA) global operating environment, supply chain leaders have to adapt to the new normal of frequent supply chain disruptions such as raw material shortages, shipment delays, materials price inflation, etc. The impact of these disruptions, however, can be minimized with efficient supply chain planning, and investments in supplier risk and performance management.
- 2. <u>Supply Chain Planning</u> can help to streamline operations, enhance efficiency, avoid delays, and bring down operating costs. Without strong supply chain planning capabilities, companies lack the visibility and foresight to prepare for unexpected risks and prolonged disruptions.
- 3. As companies anticipate frequent supply disruptions or demand fluctuations, the main priority for <u>Sourcing and Procurement</u> is to ensure supply continuity. In today's volatile environment, companies are establishing alternative sourcing and logistics options to diversify risk. Constant evaluation of sourcing and procurement strategies is important to minimize the risk of supply chain disruption and to ensure timely fulfilment of orders.



Pillar 1 – Information on SCM and its key functions

Job roles under SCM Planning, Sourcing & Procurement functions



Supply Chain Planning Function:

The planning function is responsible for **balancing supply and demand of resources** to facilitate decision making while ensuring alignment with business goals.

Planning roles are projected to have the highest number of job openings from now till 2025, particularly in demand and supply planning.

*Wholesale Trade, Retail Trade etc...

Source : Supply Chain Management Jobs Transformation Map (JTM) and EDB

Sourcing & Procurement Function (S&P):

After plans are established, the sourcing and procurement function is responsible for **identifying and managing relevant suppliers & acquiring the resources** at the right price and delivered at the right time.

With the trend of S&P hubs locating in Singapore in the last 1 to 2 years, the growing base of S&P activities has resulted in an increase in demand for more S&P talent. This demand is expected to further intensify as the trends persists.

Pillar 2 – Impact of trends on job roles and skills

Digitalisation and the pivot towards more resilient, sustainable supply chain are driving companies to review and redesign supply chain job scope and skill sets required; SCM professionals have to adapt swiftly to remain relevant and competitive.



Digitalisation

Adapting traditional supply chains with new technology to be more agile and efficient

The rise of the Digital Economy now requires traditional supply chain models to adapt to the new "normal". As a result, there is an imperative push for companies to build up their strengths in automation technologies, machine learning and end-to-end connectivity to stay competitive in an aggressively dynamic digital space while keeping up with consumers.



Resilient & Agile Supply Chain Shift towards developing a resilient supply chain in today's volatile environment

Supply chains around the world have been severely impacted by disruptions, notably the pandemic which has sent countries into lockdowns fraught with panic buying due to fear of insufficient goods. Ripple effects like global chips shortage have further accentuated the need for resilient supply chains that can weather the storm.



There has been an increase in commitment by businesses to supply chain sustainability (SCS) in Asia vis-a-vis last year, with over 40% saying the regulatory pressure had increased. In addition to stricter regulations, eco-sensitivity among consumers has also increased following the pandemic, putting pressure on large companies such as MNCs to move towards a more sustainable supply chain.

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Demand Planning Analyst** [Planning]	 Creating and implementing forecasts Leverages advanced software to run predictive analytics models using AI/ML technologies. Adept at adapting to new software, there will be less time spent on executing analysis and forecasts and more time spent in programming and checking software. Identifies and continuously refines forecast drivers Works with more data variables and to have foresight in identifying events that may potentially impact forecast. Consolidates key data-backed forecast drivers into a digital dashboard for continuous supervision and decision making. Develops demand patterns and produce reports to present demand analysis findings. 	 Digital and Green Skills Big Data Analytics Business Insights Data and Statistical Analysis Data storytelling and visualization Demand Analysis and Optimisation Trend Forecasting Workflow Digitalisation Carbon Footprint Management Domain Skills Business Continuity Planning Scenario and Strategic Planning 	Apps & Tools Microsoft Power BI R programming language Python Tableau Oracle O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note : Job roles with ** receive medium-level impact from the SCM trends.

- Job postings from various platforms, such as MyCareersFuture, JobStreet and Indeed.
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include SCM companies and Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Demand Planning Manager** [Planning]	 Creates and implements forecasts Leverages advanced software to run predictive analytics models using AI/ML technologies. Adept at adapting to new software, there will be less time spent on executing analysis and forecasts and more time spent in programming and checking software. Analyses business data over time to identify trends for the development of strategies in response to these trends, in line with the organisation's business goals. Develops demand patterns and produce reports to present demand analysis findings. Identifies and continuously refines forecast drivers Works with more data variables and to have foresight in identifying events that may potentially impact forecast. Consolidates key data-backed forecast drivers into a digital dashboard for continuous supervision and decision making. Reviews the effectiveness of trend analysis by considering all 	 Data and Statistical Analysis Demand Analysis and Optimisation Trend Forecasting Workflow Digitalisation Carbon Footprint Management Domain Skills	 SQL O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People
	 of its components. Aligns forecasted demand with the planning and management of inventory Recommends steps to improve the integration of digital technologies and processes within the organization. Aligns inventory levels in accordance with project requirements, organisational stock control procedures and systems. Analyses risk factors that can impact and disrupt the organisation's business operations. 		 Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note : Job roles with ** receive medium-level impact from the SCM trends.

Sources :

• Job postings from various platforms, such as LinkedIn, JobsDB and MyCareersFuture.

- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Supply Planner** [Planning]	 Creates and implements forecasts Leverages advanced software to run predictive analytics models using AI/ML technologies. Fluidly adapts to new software and apply digital tools to execute analysis and forecasts. More time will be dedicated to configuration and software checks. Develops demand patterns and produce reports to present demand analysis findings. Identifies and continuously refines forecast drivers Works with more data variables to develop stronger foresight in identifying potential forecast drivers. Consolidates key data-backed forecast drivers into a digital dashboard for continuous supervision and decision making. Supply chain planning, digitalisation and management Develops capacity plans to support flow and storage of materials. Plans production activities and resource availability. Adopts new technologies to improve work operations or processes. Develops carbon footprint reduction plans for implementation of initiatives. 	 Big Data Analytics Demand Analysis and Optimisation Demand Forecasting Demand and Supply Analysis Internet of Things Application Robotics and Automation Application Technology Application Trend Forecasting Workflow Digitalisation Carbon Footprint Management Business Continuity Planning Inventory Management (Planning, Sourcing, 	Apps & Tools Oracle SAP Tableau SQL O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making
		1	

Note : Job roles with ** receive medium-level impact from the SCM trends.

- Job postings from various platforms, such as LinkedIn, JobsDB and MyCareersFuture.
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include SCM companies and Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Supply Chain Management Director [Planning]	 Formulates and implements strategies to drive the business Formulates a long-term operational strategy to support overall business strategic goals at a regional or global level. Achieves end-to-end supply chain operational sufficiency to support profitable business growth by analysing current processes, identify improvement opportunities and implement improvements to business processes to ensure exceptional customer experience while optimizing costs. Oversees the management of suppliers, inventories and teams Formulates inventory management policies with key performance indicators (KPIs). Evaluates and select appropriate risk response activities to manage operational risks across business units. Develops optimisation plans to improve the application of technologies in business operations. Defines targets and competencies needed for team and department performance and development. 	 Digital Skills Demand Analysis and Optimisation Technology Application and Implementation Domain Skills Inventory Management Operations Management Risk Management Scenario and Strategic Planning Stakeholder Management Supplier Performance and Management Supply Chain Management Team Management 	Apps & Tools Oracle SAP O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

- Job postings from various platforms, such as Indeed, MyCareersFuture and LinkedIn.
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include SCM companies and Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Network Supply Planning Manager [Planning]	 Manages the planning and operations of network supply Leads the network supply planning function and orchestrates supply planning across the different nodes in E2E supply chain e.g testing, assembly, packaging. Ensures that all nodes are synchronized and any delays are communicated to affected nodes and immediately assessed. Develops overall supply plan on a monthly basis (across geographies) for timely and efficient delivery of Finished Goods (FG) products to consumers. Incorporates all functional supply planning requirements and deliver FG to customers at optimal inventory/capacity levels. Performs strategic decision-making regarding supply and customer behaviour e.g deciding the level of FG inventory to carry from 2 sites based on product specificity. 	Digital Skills • Demand Analysis and Optimisation • Demand and Supply Analysis • Technology Application Domain Skills • • Continuous Improvement • Inventory Management • Network Monitoring and Control Management • Risk Management and Administration • Scenario and Strategic Planning • Supply Chain Planning • Supply Chain Management	Apps & Tools Oracle SAP O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence
	 Ensures that operations, inventories and processes are optimised Implements supply chain optimisation plans. Aligns inventory levels in accordance with project requirements, organisational stock control procedures and systems. Develops capacity plans to support flow and storage of materials. Implement organisation's risk management framework and policies. Gathers data to track the progress of improvement activities. Adopts new technologies to improve work operations or processes. 		 Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Sources :

• Job postings from various platforms, such as MyCareersFuture and SCM companies.

SCM Jobs Transformation Map

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Supply Planning Manager [Planning]	 Leads and optimizes the end-to-end supply chain process to meet market needs Leads the supply planning function and develops raw materials inventory/semi-(FG) plan to ensure availability of semi-FG to reach next node in queue. Guides data or insights for demand and supply analysis. Matches manufacturing output to demand planning and plans how to mitigate challenges. Formulates production plans, highlighting key timelines, deliverables and accountabilities. Leads team on supplier sourcing in local and overseas market. Optimises factory usage, loading plan and raw material inventory consumption. Adopts new technologies to improve work operations or processes. Receives and executes objectives from network supply planning on both internal and external fronts. Identifies gaps and opportunities for the commercial team. Reviews changes in compliance and regulatory requirements regularly to proactively manage risk impact on operations. 	 Demand Analysis and Optimisation Demand and Supply Analysis Technology Application Domain Skills Inventory Management Production Planning Risk Management and Administration Scenario and Strategic Planning Supply Chain Management Supplier Sourcing 	Apps & Tools Oracle SAP O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Sources :

• Job postings from various platforms, such as JobsDB, Indeed and SCM companies.

- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sales & Operations Planning Manager [Planning]	 Oversees and coordinates sales, production and inventory plans Leads the S&OP function and is responsible for pulling together the planning inputs from demand and supply planning team, to balance between customer demand and resource availability. Facilitates demand and supply needs analysis activities. Value-adds by identifying gaps and opportunities and conducting and analysing multiple scenarios for planning reconciliation. Facilitates the decision-making process across the entire company, across business unit(s) and/or geographical region(s), depending on how the company is organized. Collaborates with finance team to support their profit forecast. 	 Demand and Supply Analysis Technology Application Domain Skills Budgeting Continuous Improvement Inventory Management Process Optimisation Scenario and Strategic Planning 	Apps & Tools Oracle SAP O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective
	 Maintains and improves S&OP planning Evaluates production and performance information to measure success of improvements. Manages on-site inventory levels of materials and equipment in accordance with project requirements. Adopts new technologies to improve work operations or processes. 		 Learning Agility Problem Solving Decision Making

Sources :

• Job postings from various platforms, such as MyCareersFuture, Indeed and SCM companies

SCM Jobs Transformation Map

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sales & Operations Planning Analyst [Planning]	 Forecasts demand to support demand planning and business processes Supports the S&OP Manager by analysing and reporting forecast and its accuracy to improve customer and inventory levels. Devises different analytical tool sets to provide an array of integrated solutions to improve business processes through big data analytics. Gathers data to track the progress of improvement activities. Reviews performance levels before and after the implementation to analyse effectiveness. Aligns inventory levels in accordance with project requirements, organisational stock control procedures and systems. Adopts new technologies to improve work operations or processes. 	Domain Skills•Business Performance Management•Continuous Improvement•Inventory Management•Scenario and Strategic Planning	Apps & Tools Oracle SAP Tableau O9 Kinaxis OMP Blue Yonder Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Sources :

Job postings from various platforms, such as MyCareersFuture, LinkedIn and Indeed.

SCM Jobs Transformation Map

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Procurement Specialist** [Sourcing & Procurement]	ecialist**oLeverages e-procurement systems to automate manual and routine processes such as payment.	 Market Trend Analysis 	Apps & Tools SAP Microsoft Power BI Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making
	 Conducts compliance and quality checks Consolidates documentation and contracts in a central management software. Monitors and conducts checks in a more efficient and informed manner through digitalized work processes. Supports digitalisation of work processes to enhance overall operational processes. 		

Note : Job roles with ** receive medium-level impact from the SCM trends.

- Job postings from various platforms, such as MyCareersFuture, LinkedIn and JobStreet.
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sourcing / Procurement Manager** [Sourcing & Procurement]	 Develops and refines sourcing strategies Strengthens market intelligence by analysing global data flows stored within adopted ERP systems i.e SAP. Applies predictive analytics and scenario planning to evaluate and recommend optimal sourcing pathways. Manages supplier selection and performance Leverages vendor management software to evaluate supplier performance. Develops assessment criteria for sustainable and ethical sourcing which has minimal adverse environmental impacts. Formulates metrics to manage and evaluate suppliers to review supplier performance. Manages the relationship to ensure adherence to contract terms and material requirements. Conducts cost, output and quality benchmarking exercising using digital dashboards. Conducts compliance and quality checks Consolidates documentation and contracts in a central management software. Monitors and conducts checks in a more efficient and informed manner through digitalized work processes. Develops optimisation plans to improve the application of technologies in business operations. 	Digital and Green Skills Data Storytelling and Visualisation Data Analysis and Interpretation Technology Application and Implementation Workflow Digitalisation Environmental Protection Management Domain Skills Business Continuity Planning Financial Budget Planning and Management Inventory Management Market Risk Management Product and Pricing Strategy Development Project Management Supplier Performance and Management Supplier Sourcing Supply Chain Management Vendor Management	Apps & Tools SAP Microsoft Power Bl Tableau Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note :

- Job roles with ** receive medium-level impact from the SCM trends.
- Job roles have multiple applicable titles, depending on how companies name them.

- Salaryboard
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Merchandising Executive ** [Sourcing & Procurement]	 Manages and implements merchandising strategies Leverages vendor management software to evaluate partner performance. Conducts cost, output and quality benchmarking exercising using digital dashboards. Runs data visualization exercises to identify underperforming partners and collaborate with external and internal stakeholders to remediate issues. Conducts sourcing and reviews supplier's quotations for new product development. Establishes target markets and customers for products and services. Proposes recommended selling price based on existing brands and/or products and product specifications. Analyses trends to guide merchandising decisions and management Applies predictive analytics and scenario planning to evaluate and recommend optimal merchandising pathways. Identifies key trend drivers and synthesizes impacts to the business from datasets. Implements operational improvements on warehouse management system initiatives. 	Digital and Green SkillsData and Statistical AnalysisData Analysis and InterpretationData Storytelling and VisualisationProduct DevelopmentWorkflow DigitalisationEnvironmental Protection ManagementDomain SkillsBusiness Continuity PlanningCost Control and ManagementInventory ManagementMarket ResearchMarket Risk ManagementMarket Risk ManagementProduct Costing and PricingProduct Costing and PricingProduct DevelopmentSales ManagementVisual Merchandising PresentationWarehouse Management System Administration	Apps & Tools Oracle Salesforce Tableau Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note : Job roles with ** receive medium-level impact from the SCM trends.

- Salaryboard
- SCM Jobs Transformation Map
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sourcing / Procurement Director [Sourcing & Procurement]	 Oversees and manages sourcing activities Owns the development and execution of the regional suppliers sourcing strategies and sourcing playbook. Identifies and defines best-in-class regional supply base, when deploying sourcing strategies and lead and/or manage major regional supplier negotiations with key suppliers. Builds effective working relationships with Supply Chain, R&D, and Quality leadership teams to deliver cost and quality improvements and to deliver superior supplier selection for new product innovation. Evaluates and implements new procurement technologies and systems. Oversees the implementation of the performance management strategies. Identifies and assesses category and product mix. Formulates inventory management policies with key performance indicators (KPIs). Manages systems and processes to facilitate continued improvement. 	Digital Skill Technology Application and Implementation Domain Skills Category Management Continuous Improvement Contract Management Cost Management Inventory Management Partnership Management Procurement Management Supplier Sourcing and Management Supplier Performance Supply Chain Management Supply Chain Solutioning	Apps & Tools Oracle SAP Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note : Job roles have multiple applicable titles, depending on how companies name them.

- Salaryboard
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sourcing Specialist [Sourcing & Procurement]	 Sources, appoints and manages vendors Evaluates products and/or services against required quality standards and established code of conduct according to organisational standards. Conducts tender and contract negotiation, sets up commercial terms for all the contracts in favor of the company's business. Presents data analysis results and design solutions to stakeholders. Conducts and manages contract review of procurement/vendor contacts (including marketing and software licenses) and accurately tracks for compliance with terms and conditions. Responsible for upcoming contract expirations, renewals, and other milestones as well as amendments. Reviews suppliers for quality, profitability, service, delivery status and other relevant performance indicators. Evaluates the effectiveness of automation and new technologies to solve business problems. 		Apps & Tools Oracle SAP Tableau Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

- Job postings from various platforms, such as LinkedIn, MyCareersFuture, Indeed.
- SCM Jobs Transformation Map
- LinkedIn Talent Insights (LTI)
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Sustainable / Responsible Sourcing Officer [Sourcing & Procurement]	 Ensures that products and materials meet environmental and ethical standards Develops Environmental Management Systems related operational planning and control procedures. Implements environmental and resource efficiency improvement plans. Reviews changes in compliance and regulatory requirements regularly to proactively manage risk impact on operations. Updates frameworks, programmes and documents according to regulatory changes. Handles factory compliance/audit projects and programs and sets standards for stakeholders/suppliers. Involved in sustainable sourcing (project planning, monitoring), recycling strategy and in charge of updating key stakeholders both internal (brand team, material innovation, marketing team) as well as external (customs, suppliers and sub-suppliers), some of which are cross-industry partners. Reports the outcomes of improvement activities in accordance with organisational procedures. Analyses audit reports in accordance with organisational procedures. 	 Business Data Analysis Business Insights Data Analysis and Interpretation Data Collection and Analysis Environmental Management Systems Framework Development and Implementation Environmental Protection Management Domain Skills Continuous Improvement Partnership Management Risk Management and Administration Regulatory Compliance Supply Chain Management 	Apps & Tools SAP Tableau Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Note : Job roles have multiple applicable titles, depending on how companies name them.

- Job postings from various platforms, such as JobsDB, Indeed and SCM companies.
- SCM Jobs Transformation Map
- Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Merchandising Director [Sourcing & Procurement]	 Oversees and manages merchandising plans and operations Drives the organisation's merchandising strategies and plans. Spearheads product development efforts and house brand strategies through strong strategic partnerships. Directs category management and product assortments and oversees budget forecasting for merchandising function. Understands consumer preferences, market trends and industry landscape, and can drive optimal product mix in line with organisation's strategies. Directs different pricing strategies and plans for different customer segments. Develops strategic vendor management plans. Formulates inventory management policies with key performance indicators (KPIs). Evaluates organisation's sales performance against overall sales targets. 	Digital SkillsOemand Analysis and OptimisationMerchandise Performance AnalysisDomain SkillsBudgetingBusiness NegotiationBusiness PlanningCategory ManagementInventory ManagementPricing StrategyProduct DevelopmentSales ManagementVendor Management	Apps & Tools Oracle SAP Salesforce Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Sources :

• Job postings from various platforms, such as SCM companies.

SCM Jobs Transformation Map

• LinkedIn Talent Insights (LTI)

• Feedback from industry, examples include Institute of Higher Learning (IHLs).

Job role title	Key tasks	Technical Skills required ¹	Apps & Tools and Critical Core Skills required ²
Merchandising Manager [Sourcing & Procurement]	 Manages and optimises merchandising operations Oversees the implementation of merchandising strategies and development of private label/house brand products. Responsible to develop strategic partnerships, manage product assortment and drive product development and budget management. Devise frameworks to assess market dynamics and execute analyses to uncover demand outlook of products or services while monitoring and balancing the availability of stock level. Expected to regularly review market and industry trends to drive appeal of merchandises to target customers. Monitor statistics on sales contribution margins, consumer demand, product performance. Propose improvements to the products or branding to enhance product performance. Formulate metrics to manage and evaluate suppliers to review supplier performance. Manage the relationship to ensure adherence to contract terms and material requirements. Evaluate opportunities to adjust merchandise ranges to improve sales. 	 Business Negotiation Business Planning Inventory Management Market Research Pricing Strategy Product Development Product Management Sales Management Supplier Sourcing 	Apps & Tools Oracle SAP Salesforce Critical Core Skills Communication Collaboration Customer Orientation Developing People Influence Adaptability Digital Fluency Global Perspective Learning Agility Problem Solving Decision Making

Sources :

Salaryboard

SCM Jobs Transformation Map

• LinkedIn Talent Insights (LTI)

Pillar 4 – Skills Activation Plan (support for career transition)

Job role title	Programme / Course [Provider's name]	PET or CET
Applicable for Supply Chain Management Professionals	 CCP for Supply Chain and Logistics Professionals and Coordinators Supply Chain & Logistics Academy (SCALA) For new and existing employees 	CET
	 Singapore Business Federation (SBF) For existing employees only 	
	 Singapore Aircargo Agents Association (SAAA) For existing employees only 	
	CCP for Sustainability Professionals Singapore Business Federation (SBF) 	CET
Demand Planning Manager Merchandising Executive Network Supply Planning Manager Supply Planning Manager Supply Planner Supply Chain Management Director	(SCTP) Digital Supply Chain (SIT)*	CET
Demand Planning Analyst	(SCTP) Digital Supply Chain (SIT)* (SCTP) Supply Chain Management & Industry 4.0 Professionals (RP)	CET CET
Merchandising Executive S&OP Manager	(SCTP) Digital Supply Chain (SIT)* (SCTP) Advanced Certificate in Logistics and Supply Chain Management (Synchronous E-Learning) (SMU)	CET
S&OP Analyst		CET

Pillar 4 – Skills Activation Plan (Job role level)

Job role title	Programme / Course [Provider's name]	PET or CET
Demand Planning Analyst	BEng Industrial Systems Engineering & Management (NUS) BSc in Business Analytics (NUS) Diploma in Industrial and Operations Management (RP) Bachelor of Science in Supply Chain Management (SUSS) BSc Logistics and Supply Chain Management (SUSS) Supply Chain Planning Masterclass (SUSS)	PET PET PET PET CET CET
Demand Planning Manager	BEng Industrial Systems Engineering & Management (NUS) BSc in Business Analytics (NUS) Graduate Diploma in Logistics and Supply Chain Management (SUSS)	PET PET CET
Supply Planner	BEng Industrial Systems Engineering & Management (NUS) BSc in Business Analytics (NUS) Diploma in Industrial and Operations Management (RP) Bachelor of Science in Supply Chain Management (SUSS) BSc Logistics and Supply Chain Management (SUSS) Supply Chain Planning Masterclass (SUSS)	PET PET PET PET CET CET
Supply Planning Manager	Graduate Diploma in Logistics and Supply Chain Management (SUSS)	CET

Pillar 4 – Skills Activation Plan (Job role level)

Job role title	Programme / Course [Provider's name]	PET or CET
Sales & Operations Planning Analyst	Bachelor of Science in Supply Chain Management (SUSS) Diploma in Industrial and Operations Management (RP) BSc Logistics and Supply Chain Management (SUSS) Supply Chain Planning Masterclass (SUSS)	PET PET CET CET
Procurement Specialist	BSc in Business Analytics (NUS) Diploma In Supply Chain Management (RP) Advanced Certificate in Procurement Essentials (SMU) Advanced Certificate in Strategic Sourcing (SMU) Advanced Certificate in Procurement Essentials (SMU)	PET PET CET CET CET
Sourcing / Procurement Manager	Advanced Certificate in Strategic Sourcing (SMU) Advanced Certificate in Procurement Essentials (SMU)	CET CET
Merchandising Executive	Bachelor in SCM (SUSS) Diploma In Supply Chain Management (RP) BEng Engineering Systems and Design (SUTD) Product Management Programme (SMU)	PET PET CET CET
Sourcing / Procurement Director	Advanced Certificate in Strategic Sourcing (SMU) Advanced Certificate in Procurement Essentials (SMU)	CET CET

Pillar 4 – Skills Activation Plan (Job role level)

Job role title	Programme / Course [Provider's name]	PET or CET
Sourcing Specialist	Advanced Certificate in Strategic Sourcing (SMU)	CET
Sustainable / Responsible Sourcing Officer	Advanced Certificate in Strategic Sourcing (SMU) Transitioning to Green Supply Chains (SUSS)	CET CET
Merchandising Director	Product Management Programme (SMU)	CET
Merchandising Manager	Product Management Programme (SMU)	CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Account Management	Negotiation and Relationship Management (SUSS)	CET
Artificial Intelligence Application	Generative AI: Applications, Prompt Engineering and the power of ChatGPT (SMU) Accelerating Deploying and Scaling Artificial Intelligence (AI) Applications (Synchronous e-Learning) (NYP) Leading Supply Chains in the Digital Era (SUSS)	CET CET CET
Big Data Analytics	Business Analytics (NUS) Learning from Data (NUS) Automate Your Excel Processes using VBA Macros (RP) Certificate in Technology Foundations: Unearthing the Potential of Databases, Big Data and Data Analytics (SMU) Extracting Business Value through Data Analytics (SMU) Data Analytics for Managers (SMU) Create an Interactive Dashboard in a Day (RP)	PET PET CET CET CET CET CET
Budget Management	Managing the Financial Supply Chain (NUS)	CET
Budgeting	Managing the Financial Supply Chain (NUS)	CET
Business Continuity Planning	Business Continuity Planning (Synchronous E-Learning) (SMU) Manage and implement Business Continuity Plans (Classroom + Asynchronous E-learning) (Business Continuity-Planning Asia Pte. Ltd.)	CET CET
Business Data Analysis	Data Analytics for Business Practices: Intermediate (SIT)	CET
Business Insights	Data Visualisation for Enhanced Business Insights (RP) Data Analytics for Business Insights (Modular Unit stackable to Specialist Diploma in Business Analytics) (TP) Supply Chain Analytics (SUSS)	CET CET CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Business Negotiation	Business Negotiation (SUSS) Powerful Business Negotiation Mastery (TP)	CET CET
Business Performance Management	Business Analysis (SUSS) Create an Interactive Dashboard in a Day (RP)	CET CET
Business Planning	Dynamic Business Planning and Modelling (NUS)	CET
Carbon Footprint Management	Green Supply Chain Management (RP) Development of Carbon Footprint Reduction Roadmap (SUSS)	CET CET
	Design for Sustainability (NTU) Introduction to Carbon Accounting: Carbon Emissions and Reporting for Corporations (SMU)	CET CET
Category Management	Advanced Certificate in Strategic Sourcing Module 1: Effective Category Management (Synchronous E- learning) (SMU)	CET
	Category Management (SUSS)	CET
Continuous Improvement	Continuous Process Improvement L3 (SF): Fostering a Continuous Improvement Culture (NTUC LearningHub)	CET
Contract Management	Essentials of Preparing & Negotiating Contract Terms (Marketing Institute of Singapore)	CET
Contract Preparation, Evaluation, Negotiation and Tendering	Essentials of Preparing & Negotiating Contract Terms (Marketing Institute of Singapore)	CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Cost Management	Cost Analysis and Management (NUS)	CET
Data Analysis and Interpretation	Data Analytics for Business Practices: Intermediate (SIT) Data Analytics with Power BI (RP)	CET CET
Data and Statistical Analysis	Optimisation and Simulation for Decision Making (SUSS) Data Analytics with Power BI (RP) Data Validation and Statistical Analysis with Programming (SUTD)	PET CET CET
Data Collection and Analysis	Data Analytics with Power BI (RP)	CET
Data Interpretation and Analysis	Data Analytics for Business Practices: Intermediate (SIT)	CET
Data Storytelling and Visualisation	Business Analytics: Using Analytics to Solve Business Problems and Create Opportunities (SMU) Data Visualization with Qlik (SP) Data Analytics Using Advanced Power BI (Synchronous E-learning) (SMU) Data Visualisation using Python (NUS) Data Storytelling & Design (Synchronous e-learning) (NP) Data Analytics: Data Storytelling (Classroom & Asynchronous) (SUSS)	CET CET CET CET CET CET
Demand Analysis and Optimisation	Data Analytics with Power BI (RP) Inventory Ordering and Replenishment Decision (RP)	CET CET
Demand and Supply Analysis	Modelling Analytics (NUS) Optimisation and Simulation for Decision Making (SUSS) Supply Chain Planning Masterclass (SUSS) Inventory Ordering and Replenishment Decision (RP) Optimization, Simulation & Modelling in Supply Chain & Logistics Management (Synchronous e-learning) (NUS) Supply Chain Analysis and Design (NTU)	PET CET CET CET CET CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Demand Forecasting	Basic Demand Forecasting Techniques (RP) Supply Chain Planning Masterclass / Inventory Management (SUSS)	CET CET
Environmental Management Systems Framework Development and Implementation	Environmental Assessment and Management System (RP) Environmental Management and Sustainable Development (SUSS) Sustainable Foundations: Building a Framework for Sustainability (SMU)	CET CET CET
Environmental Protection Management	Procurement Strategy and Policy (SUSS) Environmental Protection Management for Sustainable Development (SCALA)	PET CET
Financial Analysis	Financial Analysis and Business Decisions for Non-Finance Managers (Synchronous e-learning) (NUS)	CET
Financial Budget Planning and Management	Managing the Financial Supply Chain (NUS)	CET
Inventory Management	Cost Analysis and Management (NUS) Inventory Management (SUSS) Inventory Ordering and Replenishment Decision (RP) Techniques to Achieve Supply Chain Optimisation (SCALA)	PET PET CET CET
Market Research	goMRTech (Market Research with Technology) (RP)	CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Market Risk Management	Trading and Risk Management of Bulk Commodities (SMU) Commodity Price Risk Management (synchronous e-learning) (SMU)	CET CET
Market Trend Analysis	goMRTech (Market Research with Technology) (RP)	CET
Material Management (Planning, Sourcing, Use, Disposal)	Material Management (Planning, Sourcing, Use, Disposal) (SCALA) Warehousing and Material Handling (SUSS)	CET CET
Merchandise Performance Analysis	Sales Analytics (RP)	CET
Network Monitoring and Control Management	Network Systems (TP) Computer Networks (SUTD)	CET CET
Operations Management	Design & Implement Operational Risk Management (SMU) Managing Operations (SUSS)	CET CET
Partnership Management	Negotiation and Relationship Management (SUSS)	CET
Pricing Strategy	Product and Pricing Analytics (NUS)	CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Process Optimisation	Techniques to Achieve Supply Chain Optimisation (SCALA) Supply Chain Design and Management (RP)	CET CET
Product and Pricing Strategy Development	Revenue Management and Pricing Analytics (NUS) Dynamic Pricing and Revenue Management (NUS)	PET CET
Product Costing and Pricing	Product and Pricing Analytics (NUS)	CET
Product Development	Dynamic Pricing and Revenue Management (NUS)	CET
Product Management	Dynamic Pricing and Revenue Management (NUS)	CET
Production Planning	Production Planning & Scheduling for Smart Manufacturing (SIMTech)	CET
Production Planning and Scheduling	Production Planning & Scheduling for Smart Manufacturing (SIMTech) Supply Chain Planning Masterclass / Inventory Management (SUSS)	CET CET
Regulatory Compliance	Compliance, Regulations and the Regulatory Environment (SUSS)	CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Risk Management	Supply Chain Risk Management (NUS) Enterprise Risk Management Programme Module 3: Operationalise Risk Management to Achieve Strategic Objectives (SMU)	CET CET
Risk Management and Administration	Supply Chain Risk Management (NUS) Enterprise Risk Management Programme Module 3: Operationalise Risk Management to Achieve Strategic Objectives (SMU)	CET CET
Sales Management	Art & Science of Sales Management (Synchronous E-Learning) (SMU) Strategic Digital Sales Leadership & Management (SMU)	CET CET
Scenario and Strategic Planning	Supply Chain Planning Masterclass / Supply Chain Management (SUSS)	CET
Stakeholder Management	Negotiation and Relationship Management (SUSS)	CET
Supplier Performance	Procurement and Supply Management in the Digital Era (SUSS) Sourcing and Supply Management (SUSS)	PET CET
Supplier Performance and Management	Procurement and Supply Management in the Digital Era (SUSS)	CET
Supplier Sourcing	Procurement and Supply Management in the Digital Era (SUSS) WSQ Strategic Sourcing (NTUC LearningHub)	CET CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Supply Chain Management	Supply Chain Modelling (NUS) Supply Chain Planning Masterclass / Supply Chain Management (SUSS) Global Supply Chain Management (NUS) Transformational Strategies for Supply Chain and Logistics Management (Synchronous e-learning) (NUS) Advanced Certificate in Supply Chain Innovation and Transformation (SMU) Advanced Certificate in Logistics and Supply Chain Management (SMU)	PET CET CET CET CET CET CET
Supply Chain Planning	Global Supply Chain Management (NUS) Transformational Strategies for Supply Chain and Logistics Management (Synchronous e-learning) (NUS) Supply Chain Planning Masterclass / Supply Chain Management (SUSS)	CET CET CET
Supply Chain Solutioning	Global Supply Chain Management (NUS) Transformational Strategies for Supply Chain and Logistics Management (Synchronous e-learning) (NUS)	CET CET
Team Management	The LEAD Programme on Effective Team (SMU) The Facilitative Leader of Self-Managed Teams (SF) (SNEF)	CET CET
Technology Adoption and Innovation	Introduction to Automation System Design for Product Development & Manufacturing Process (NYP) IoT Applications in Supply Chain Management - Synchronous e-learning (NYP)	CET CET
Technology and Systems Application	Introduction to Automation System Design for Product Development & Manufacturing Process (NYP) IoT Applications in Supply Chain Management - Synchronous e-learning (NYP)	CET CET

Technical Skill	Programme / Course [Provider's name]	PET or CET
Trend Forecasting	Applied Forecasting Methods (NUS) Supply Chain Planning Masterclass / Inventory Management (SUSS)	PET CET
	Business Analytics and Forecasting Techniques (Synchronous and Asynchronous e-Learning) (NTU)	CET
Vendor Management	WSQ Vendor Performance Management (NTUC LearningHub)	CET
Visual Merchandising Presentation	Introduction To Retail Merchandising (TP) MLC - Visual Merchandising for Successful e-Commerce (TP)	CET CET
Workflow Digitalisation	goRPA –UIPath (RP) Experience how Robotic Process Automation (RPA) makes your work easier – StudioX (RP) Experience Power Automate in a Day (RP)	CET CET
	Smart Technologies and Business Intelligence – Enhancing Business Operations Through the Adoption of Smart Technologies (SMU)	CET CET

Critical Core Skill	CCS Cluster	Webpage to access relevant courses
Communication	Interacting with others	MySkillsFuture Course Directory
Collaboration	Interacting with others	
Customer Orientation	Interacting with others	
Developing People	Interacting with others	
Influence	Interacting with others	
Adaptability	Staying relevant	
Digital Fluency	Staying relevant	
Global Perspective	Staying relevant	
Learning Agility	Staying relevant	
Problem Solving	Thinking critically	
Decision Making	Thinking critically	

Glossary of terms

Acronym	Full Terminology	Acronym	Full Terminology
CET	Continual Education and Training	SUTD	Singapore University of Technology and Design
ССР	Career Conversation Programme	TP	Temasek Polytechnic
NP	Ngee Ann Polytechnic		
NTU	Nanyang Technological University		
NUS	National University of Singapore		
NYP	Nanyang Polytechnic		
PET	Primary Education and Training		
RP	Republic Polytechnic		
SCTP	SkillsFuture Career Transition Programme		
SIMtech	Singapore Institute of Manufacturing Technology		
SIT	Singapore Institute of Technology		
SMU	Singapore Management University		
SNEF	Singapore National Employers Federation		
SUSS	Singapore University of Social Science		

Annex : Methodology for Pillar 3 – SCM job roles and skills required

For each SCM job role under the Planning, Sourcing & Procurement functions, the information on key tasks, technical skills, critical core skills and apps & tools were derived from :

- Quantitative analysis on job posting data from national jobs skills repository, and from job postings by SCM companies to determine key tasks, skills, apps & tools required;
- Supplementary quantitative analysis using LinkedIn Talent Insights to determine skills, apps & tools equipped by the workforce;
- Referencing the SCM Job Transformation Map study completed in July 2023, and
- Validation with industry experts and academic.

Acknowledgement

Contribution by Supply Chain Leaders

- Chun Hao LOK, Head of Global Supply Chain, Archroma
- Pau Chiang WOO, Vice President, Corporate Supply Chain Asia Pacific, Infineon Technologies Asia Pacific
- Sanket BUCHE, Vice President of Product Supply Asia Pacific, Middle East and Africa, Procter & Gamble

Contribution by Institutes of Higher Learning

- Dr Sugoutam GHOSH, Senior Lecturer, Logistics and Supply Chain Management, Singapore University of Social Sciences
- Michael LOW, Deputy Director, Curriculum Development & Digitalisation, SMU Academy
- TAN Yan Weng, Head of Programme, Logistics and Supply Chain Management, Singapore University of Social Sciences
- WEE Lian Chian, Programme Chair, Diploma in Supply Chain Management, School of Engineering, Republic Polytechnic

Others

- A*STAR Advanced Remanufacturing Technology Centre (ARTC) Supply Chain Control Tower
- Workforce Singapore (WSG)

About the Singapore Economic Development Board

The Singapore Economic Development Board (EDB), a government agency under the Ministry of Trade and Industry, is responsible for strategies that enhance Singapore's position as a global centre for business, innovation, and talent. We undertake investment promotion and industry development, and work with international businesses, both foreign and local, by providing information, connection to partners and access to government incentives for their investments. Our mission is to create sustainable economic growth, with vibrant business and good job opportunities for Singapore and Singaporeans. For more information on EDB, please visit www.edb.gov.sg

About SkillsFuture Singapore

SkillsFuture Singapore (SSG) drives and coordinates the implementation of the national SkillsFuture movement, promotes a culture of lifelong learning and strengthens the ecosystem of training and adult education in Singapore. Through a holistic suite of national SkillsFuture initiatives, SSG enables Singaporeans to take charge of their learning journey in their pursuit of skills mastery. SSG also works with key stakeholders to ensure that students and adults have access to high quality and industry-relevant training that meet the demands of different sectors of the economy for an innovative and productive workforce. For more information, visit https://www.skillsfuture.gov.sg/.

For enquiries, you may reach out to Ms Sharmine Oie Sharmine_Oie@ssg.gov.sg