



REPORT

THE LOGISTICS INDUSTRY SKILLS FORECAST REPORT

UPDATED IN 2024

(Summary)



OVERVIEW

Labour demand forecasting is an essential task in socio-economic strategy development as well as in the strategy development of particular economic sectors.

However, skills demand forecasting in Vietnam remains a challenge due to limited resources, approach and cohesive coordination among stakeholders, especially the absence of employers - the demand side in the labour market. A focus on forecasting is timely. While the logistics skills forecast was being conducted, the Government identified human resources development as one of the five key tasks for Vietnam's future socio-economic development. In addition, logistics services quality improvement and infrastructure development are now considered important drivers for economic competitiveness.

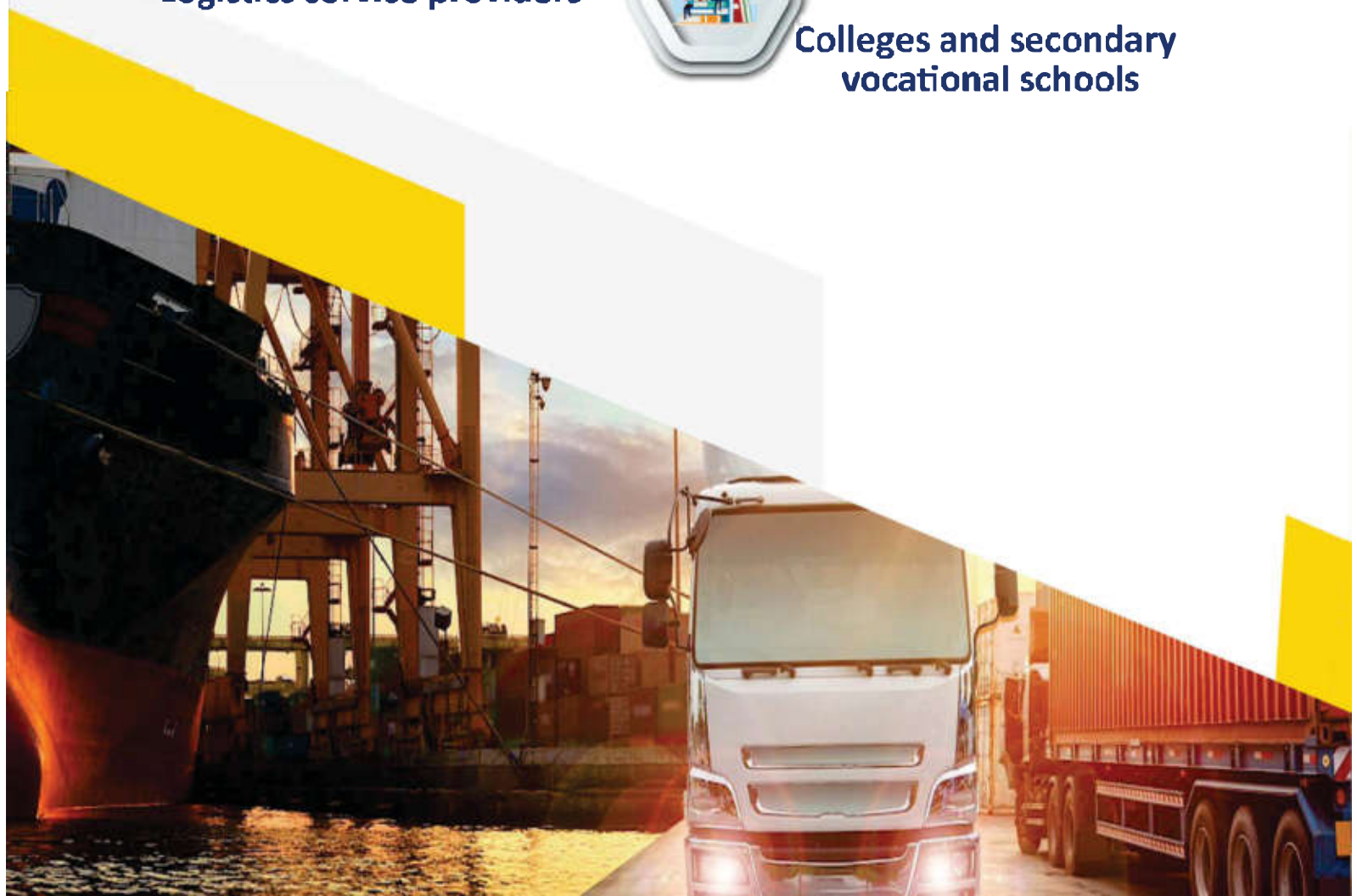
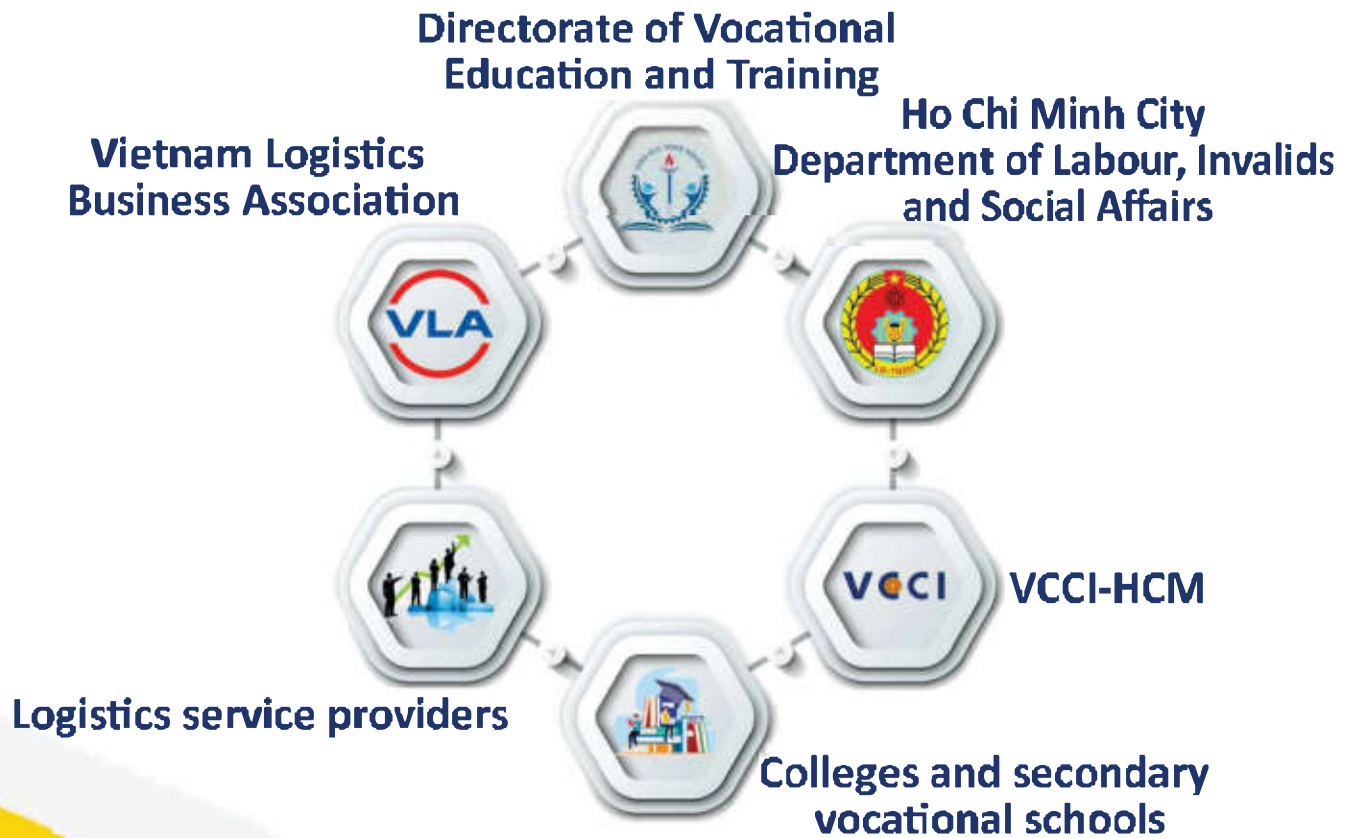
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The report is sponsored by the Australian Department of Foreign Affairs and Trade, through the Aus4Skills program, supported by Directorate of Vocational Education and Training and the Vietnam Chamber of Commerce and Industry, Ho Chi Minh City.

One of Aus4Skills' highlights is the establishment of the Logistics Industry Reference Council [LIRC] whose founding members embrace the core functions of the Australian Industry Reference Council (IRC) model.





The Council, as one of its short-term objectives, is specifically focusing on promoting strong and substantive cooperation between training institutions and industry, and formulating occupational standards, occupational skills standards, and specialised reports related to manpower development, including the logistics skills forecast.



This is the first industry-driven skills forecast with direct participation from logistics service providers. Special thanks to:

- || LIRC members
- | Australian Industry Standards Global (AIS)



Objectives:

The logistics skills forecast is expected to provide practical and systemic information on occupational skills for the Logistics industry (2021-2023).

This aligns with a key task of the industry-led LIRC - to provide practical and effective advice regarding human resources training in light of the Industry 4.0 and the COVID-19 pandemic and in response to the changes in the labour market in the coming years.





METHODOLOGY

The forecast strictly followed established research methodology in 3 main phases as follows.



▶ Phase 1:

Desktop study: to collect and analyse secondary data for preliminary analysis and overview of the logistics industry in Vietnam, labour supply and demand and development trends.

▶ Phase 2:

Engage 15 stakeholder organisations, with representatives at each group discussion holding executive and human resource management positions from: Logistics service providers; Manufacturing and export enterprises; Vietnam Logistics Business Association, and the Industry Associations



**On 22 January 2021 in Ho Chi Minh City,
27 January 2021 in Hanoi, and
26 March 2021 in Can Tho**

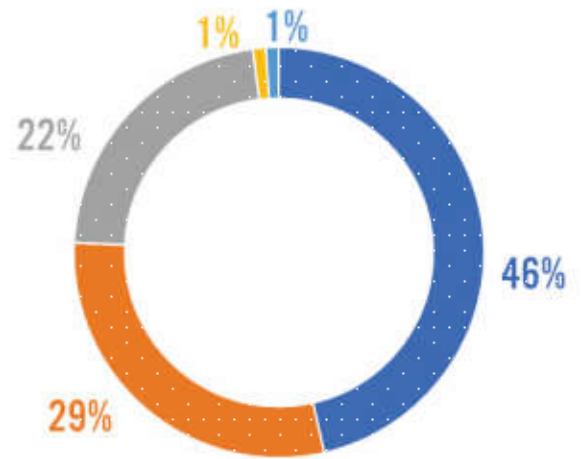


▶ Phase 3:

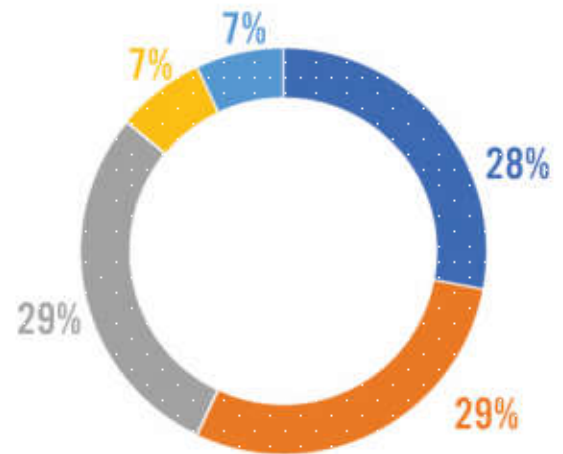
**Questionnaire survey based on qualitative results and analysis of data obtained from logistics service providers and manufacturing enterprises in various sub-sectors.
Finally, the research team makes suggestions and recommendations based on the research findings.**

KEY FINDINGS

GENERAL INFORMATION ON SURVEY COHORT



Logistics service providers

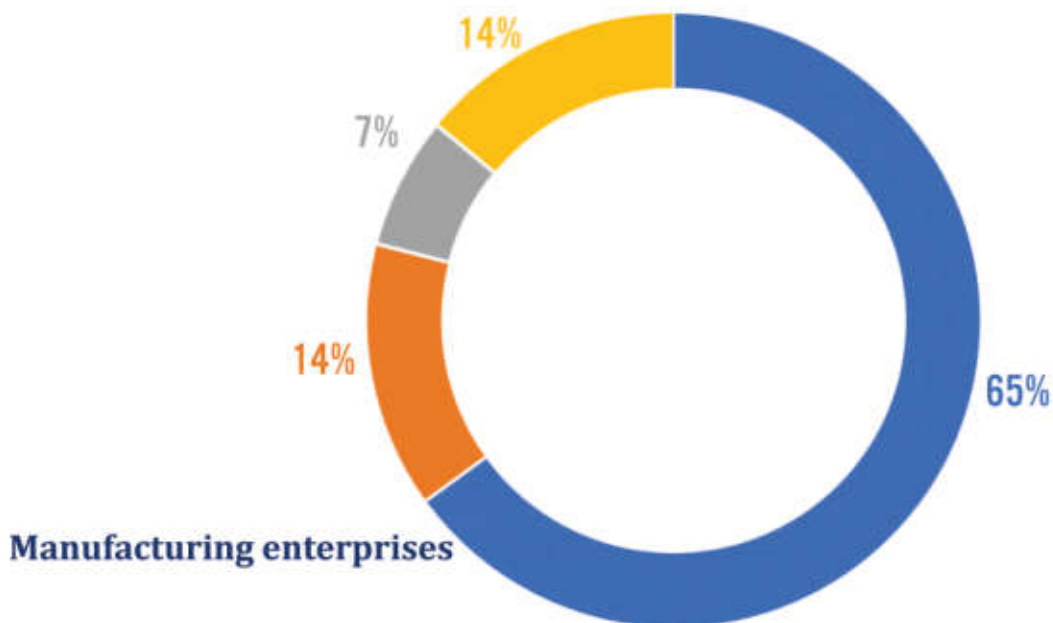


Manufacturing enterprises

- Limited Liability Company
- Joint Stock Company
- State Owned Company
- Foreign Company
- Joint Venture Company



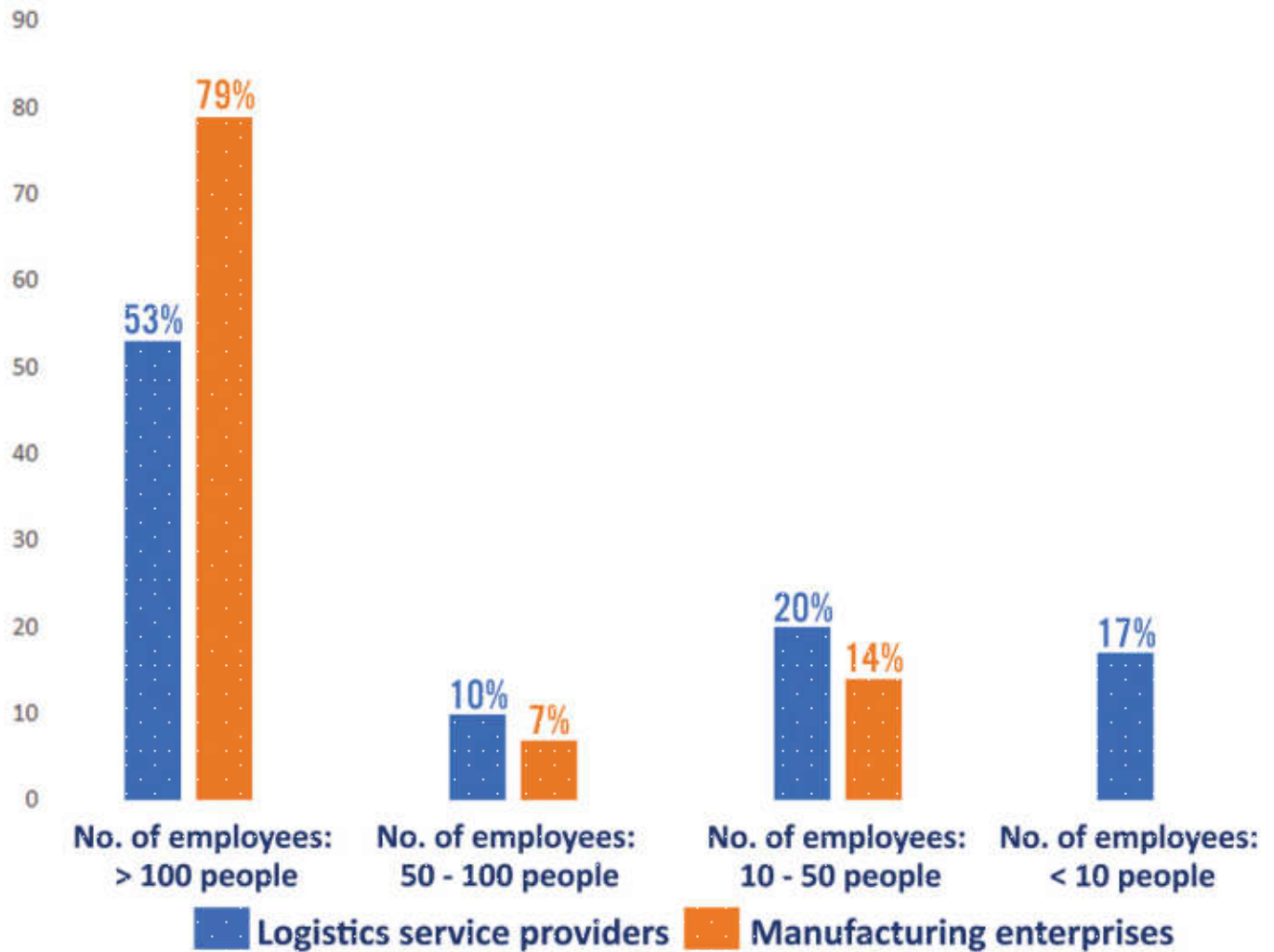
- Freight Forwarder/Logistics Company
- Shipping Line
- Road Transport Company
- Express Courier Company and Inland Container Depot (ICD)/Warehouse
- General Service Provider
- Rail Freight Company
- Inland Waterway and Seaport Company
- Other types of business

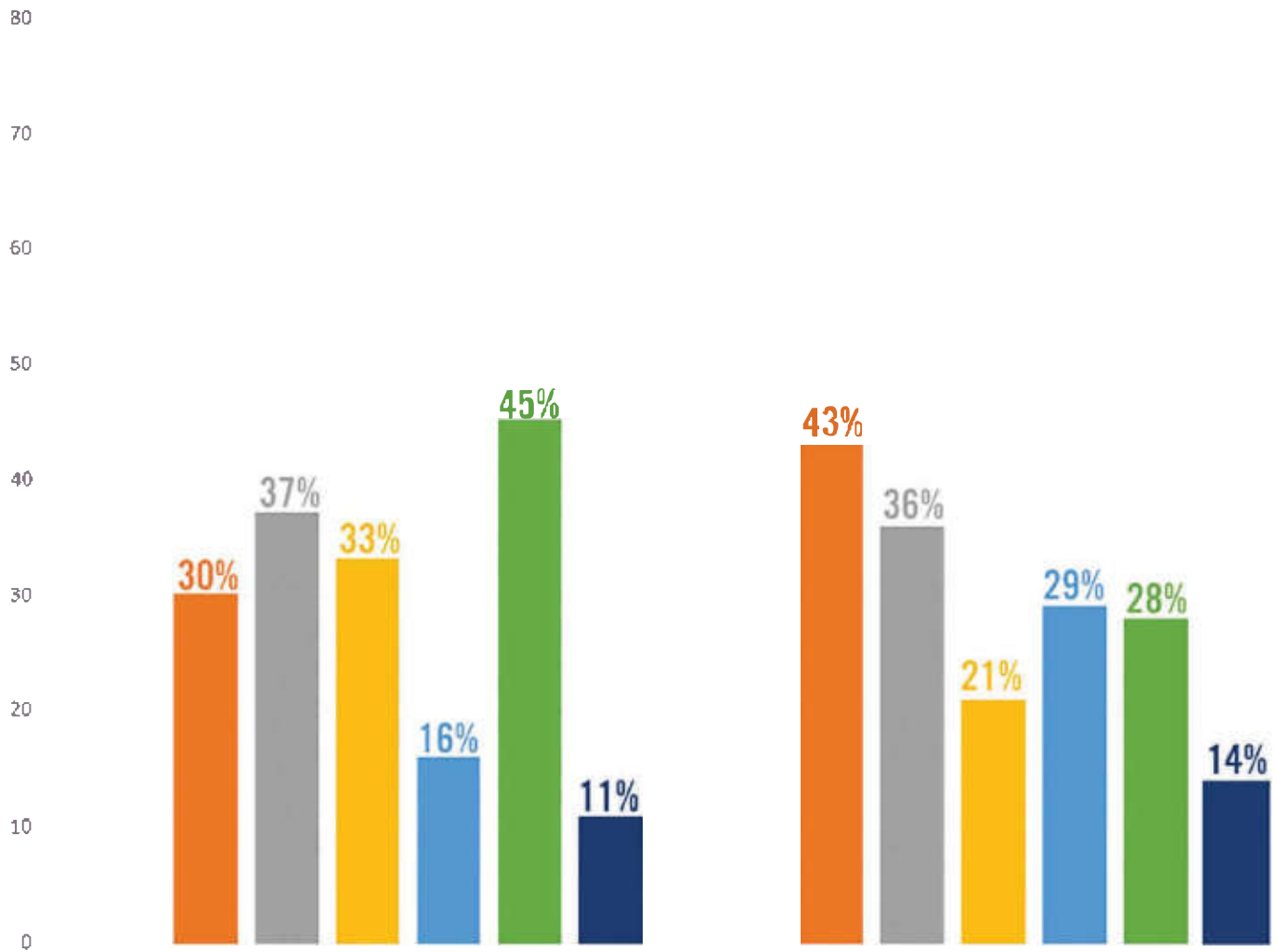


- Exporter
- Domestic Distributor
- Contract Manufacturer for Oversea Clients
- General Manufacturing enterprises and Others

KEY FINDINGS

GENERAL INFORMATION ON SURVEY COHORT





Logistics service providers

Manufacturing enterprises

- Senior manager
- Manager
- Staff
- Seniority: 6 -10 years
- Seniority: 1 -5 years
- Seniority: < 1 year

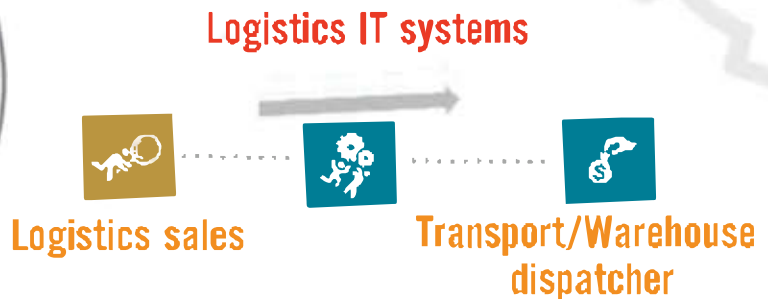


LOGISTICS POSITIONS IN SHORTAGE AND SOLUTIONS

Logistics service providers and Manufacturing enterprises in Vietnam are always in severe/acute shortage.



Top positions in great shortage include:



Other positions also in shortage due to recruitment challenges include:



As Industry 4.0 takes the world by storm, enterprises are increasing adopting advanced technologies in doing business, leading to the short supply of qualified information and communications technology (ICT) staff and demands to address the shortage quickly.

Positions in warehouse operation and quality control ranked second in recruitment challenges, followed by logistics administrators/coordinators, import and export documentation staff, logistics sales, delivery staff, loading and unloading staff, procurement staff, inventory and recall controllers, and experienced technicians.

There was a high level of consensus between Logistics service providers and Manufacturing enterprises on the reasons for recruitment difficulty, including: lack of experience, professional knowledge and skills.

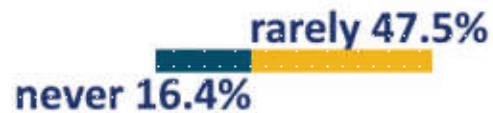
In addition, high time demands and job pressures also explain recruitment challenges for Logistics service providers including - foreign language proficiency, absence of professional certificates, hazardous working environment (such as working in cold storage, night shift, ...), long working hours, wages, long-term commitment or labour market competition; etc.

Solutions for logistics HR shortage - Logistics service providers:

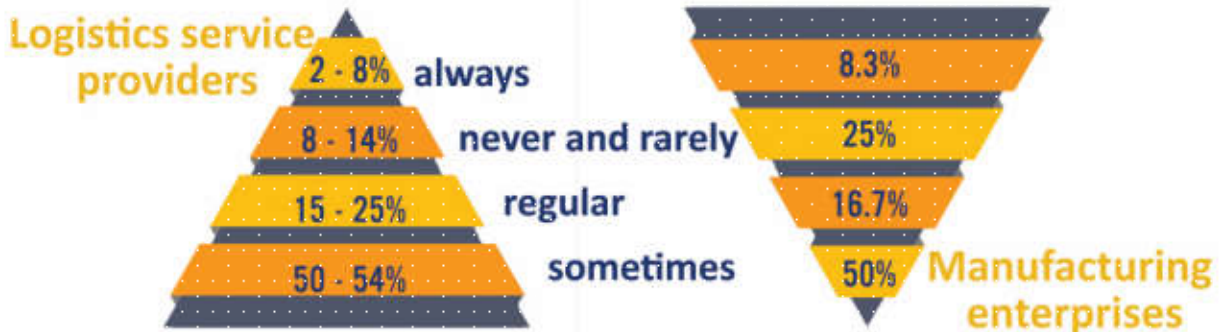
Internal transfer and additional training done overseas:



Hiring temporary workers:



Outsourcing, overtime scheduling for skilled workers (OT), internal transfer and in-country additional training:



Solutions for logistics HR shortage - Manufacturing enterprises:

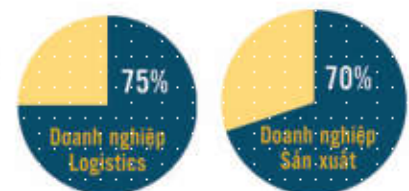
Internal transfer and additional training done domestically is rarely deployed:



Outsourcing for certain positions:



Seeking new sources of manpower implies opportunities as well as challenges for logistics training providers to supply labour of desired quantity and quality to better respond to market needs.



IMPORTANCE AND LEVEL OF LOGISTICS KNOWLEDGE AND SKILLS

5 most important knowledge and skills for the success of logistics manpower



3 knowledge and skills possessed by logistics manpower:

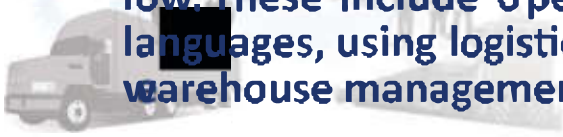
At medium high level:

- Understanding and application of logistics terms
- Transportation management
- Procurement management
- Order management
- Planning of means of transport and equipment

At medium low level:

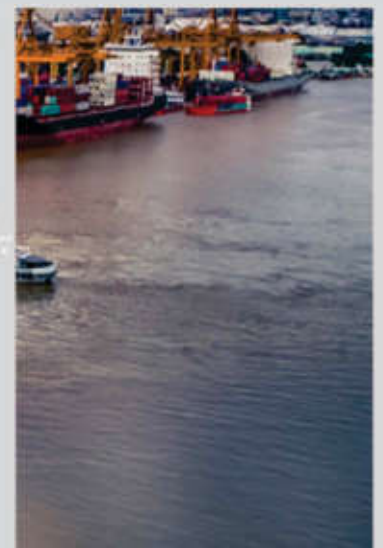
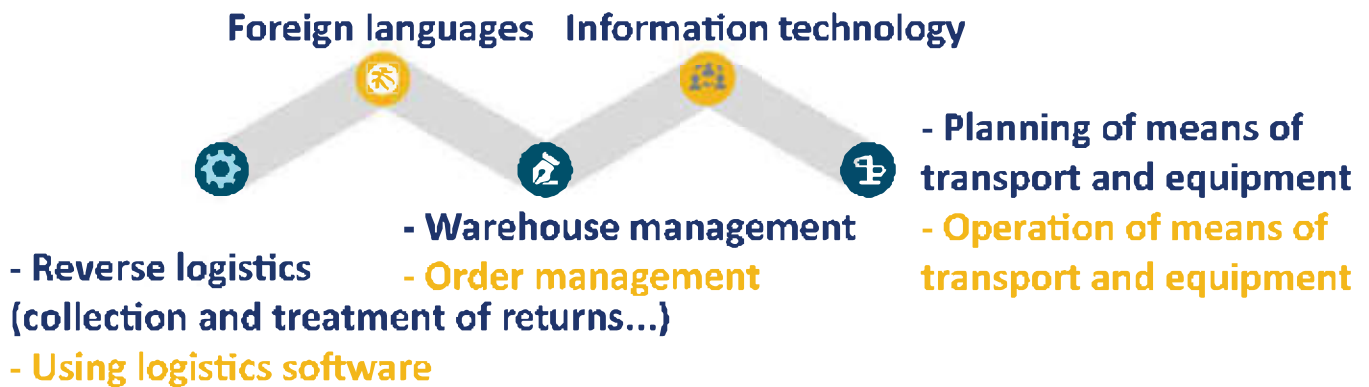
- Procurement management
- Warehouse management
- Packaging and package processing
- Operation of transport and equipment
- Foreign languages
- Using logistics software

The survey shows that, in general, Logistics service providers and Manufacturing enterprises had a medium level of logistics knowledge and skills, approaching a higher level. However, for several logistics knowledge and skills identified as important and fairly important, the current level was only at medium low. These include operation of transport and equipment, foreign languages, using logistics software, procurement management, and warehouse management.





Top 5 serious gaps between the perceived importance and current level of knowledge and skills in Logistics service providers and Manufacturing enterprises were in:



THE IMPORTANCE AND LEVEL OF OTHER ESSENTIAL ATTITUDES AND CAPABILITIES

The results show 6 attitudes and capabilities which were given high importance by both Logistics service providers and Manufacturing enterprises for the success of logistics manpower:



**Compliance with regulations, policies
(including corporate information security)**

Being proactive at work





3 attitudes and capabilities that logistics manpower in Logistics service providers possess:

**At high level:
Compliance with regulations,
policies (including corporate
information security)**

Honesty

Handling high pressure at work

**At low level:
Emotional intelligence,
observing, thinking, analysing,
and decision-making**

Creativity

Work planning

Meanwhile, in general, the level of essential attitudes and capabilities in Manufacturing enterprises was lower than in Logistics service providers.

**At medium high level:
Compliance with regulations,
policies (including corporate
information security)**

Honesty

Handling high pressure at work

**At low and medium low level:
Emotional intelligence**

Creativity

**Patience and perseverance,
negotiation skills**



The results also show the top 5 serious gaps between the perceived importance and current level of essential attitudes and capabilities in Logistics service:

Logistics service providers

Manufacturing enterprises





The research team raised the following key points after comparing the perceived importance and current level of appropriate logistics knowledge, skills, and other essential attitudes and capabilities:



Knowledge, skills, attitudes and capabilities that have high perceived importance and medium high level of ownership should be maintained.








Those with a fairly high perceived importance and medium low level of ownership should be built up, while those with fairly high perceived importance and medium high level of ownership should be redistributed among existing resources with accompanying training.



Finally, those with high perceived importance and low/medium level of ownership should be improved

NOTABLE SOCIAL, BUSINESS AND TECHNOLOGY DEVELOPMENT TRENDS INFLUENCING THE DEMAND FOR LOGISTICS MANPOWER

It is interesting that both participating Logistics service providers and Manufacturing enterprises indicated that the first four trends below will have the greatest impact on demand for logistics manpower up to 2023, while the fifth factor will significantly influence logistics human resources:

-  Sustainable Logistics/supply chains
-  E-transactions
-  Omnichannel logistics/distribution
-  Changes in future job profiles
-  Application of artificial intelligence (AI)

and a number of other technologies

(wireless connection, big data, and the Internet of things)

These social, business and technological development trends directly affect logistics human resources and generate demand for certain positions in the future



IMPACTS OF SOCIAL, BUSINESS AND TECHNOLOGICAL DEVELOPMENT TRENDS ON DEMAND FOR LOGISTICS MANPOWER



According to Logistics service providers, by 2023:

The demand for the following positions will increase:

- Logistics IT systems
- Logistics sales
- Customer service

While the following positions will see a decrease in demand:

- Warehouse operator
- Inventory management
- Transport dispatcher



While Manufacturing enterprises claimed that:

The demand for the following positions will increase:

- Logistics IT systems
- Packaging, labeling
- Quality Assurance

The following positions will see a decrease in demand:

- Warehouse operator
- Import-export documentation
- Custom brokerage

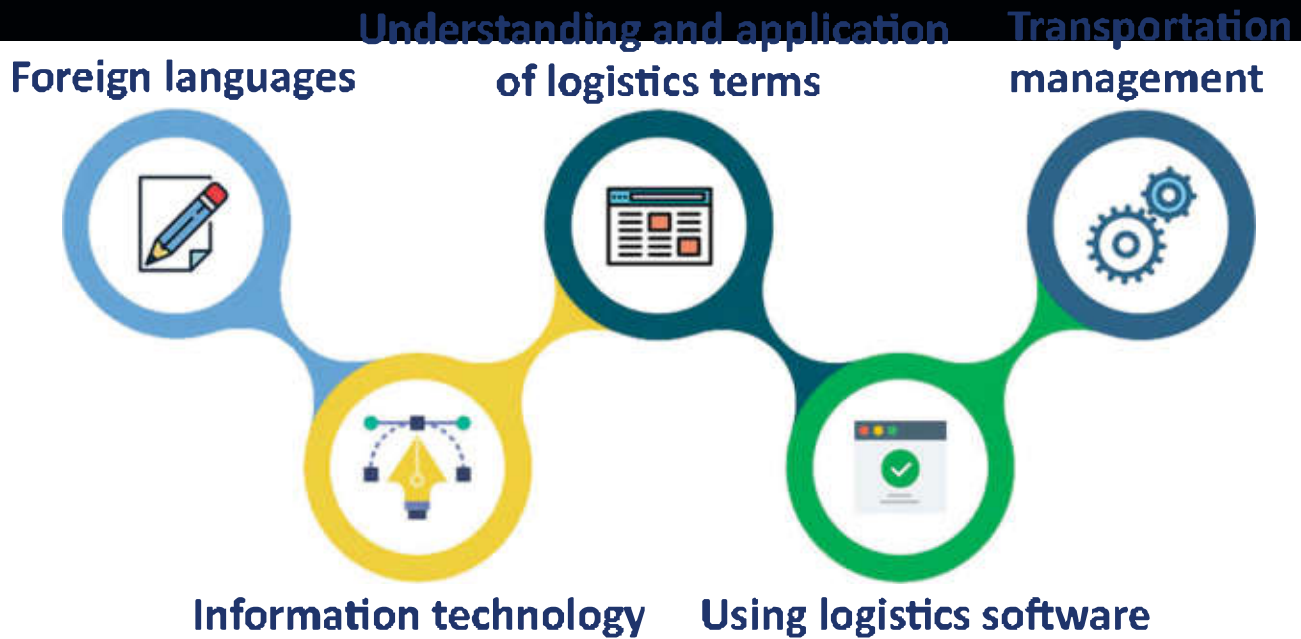


**DEMAND FOR WORKFORCE WITH
APPROPRIATE LOGISTICS KNOWLEDGE AND SKILLS**





The survey results show that Logistics service providers marked high priority (close to extremely high priority) for the following **5 logistics knowledge and skills demands:**



Demand for workforce with logistics knowledge and skills in the next 3 years in Manufacturing enterprises shared the same pattern, with 3 out of the 5 knowledge and skills above marked with fairly high priority: **information technology, using logistics software and foreign language.**

Manufacturing enterprises also marked two additional knowledge and skills as high priority, i.e. **procurement management and order management.**

DEMAND FOR LOGISTICS MANPOWER WITH OTHER ESSENTIAL ATTITUDES AND CAPABILITIES

The survey results also showed that the **5 attitudes and capabilities** with high priority (close to extremely high) in the next 3 years for Logistics service providers and Manufacturing enterprises were similar.



Compliance with regulations, policies
(including corporate information security)



Honesty, being proactive at work



Handling high pressure at work



Problem solving and adapting



Adapting to and using new technology





This implies that Logistics service providers recognised the importance of a highly disciplined workforce who were “organisational citizens” with:



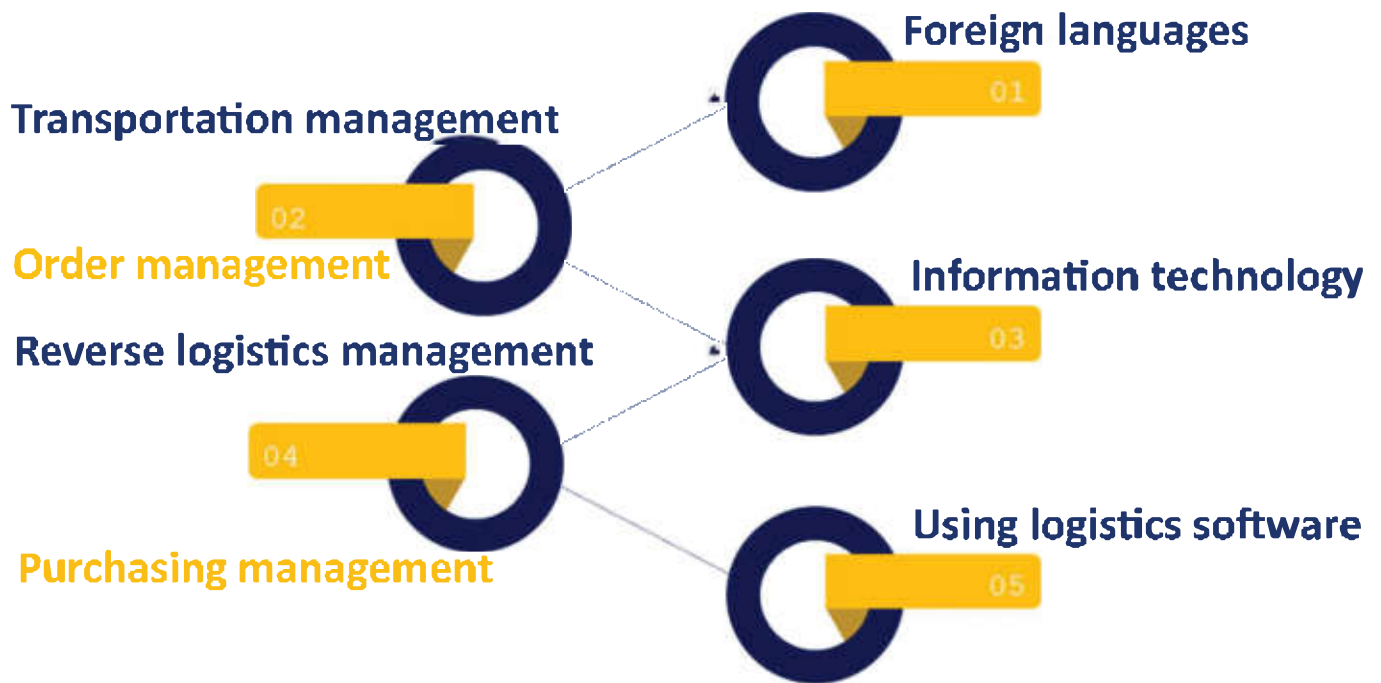
In addition, other attitudes and capabilities that were given high priority demand, include:

-  Work planning
-  Observing, thinking, analysing, and decision-making
-  Teamwork



**A COMPARISON BETWEEN CURRENT STATUS AND
FUTURE DEMAND FOR LOGISTICS WORKFORCE
WITH ESSENTIAL KNOWLEDGE AND SKILLS**

The survey results show that the top **5 serious gaps** between demand and level of logistics knowledge and skills in Logistics service providers and Manufacturing enterprises were:



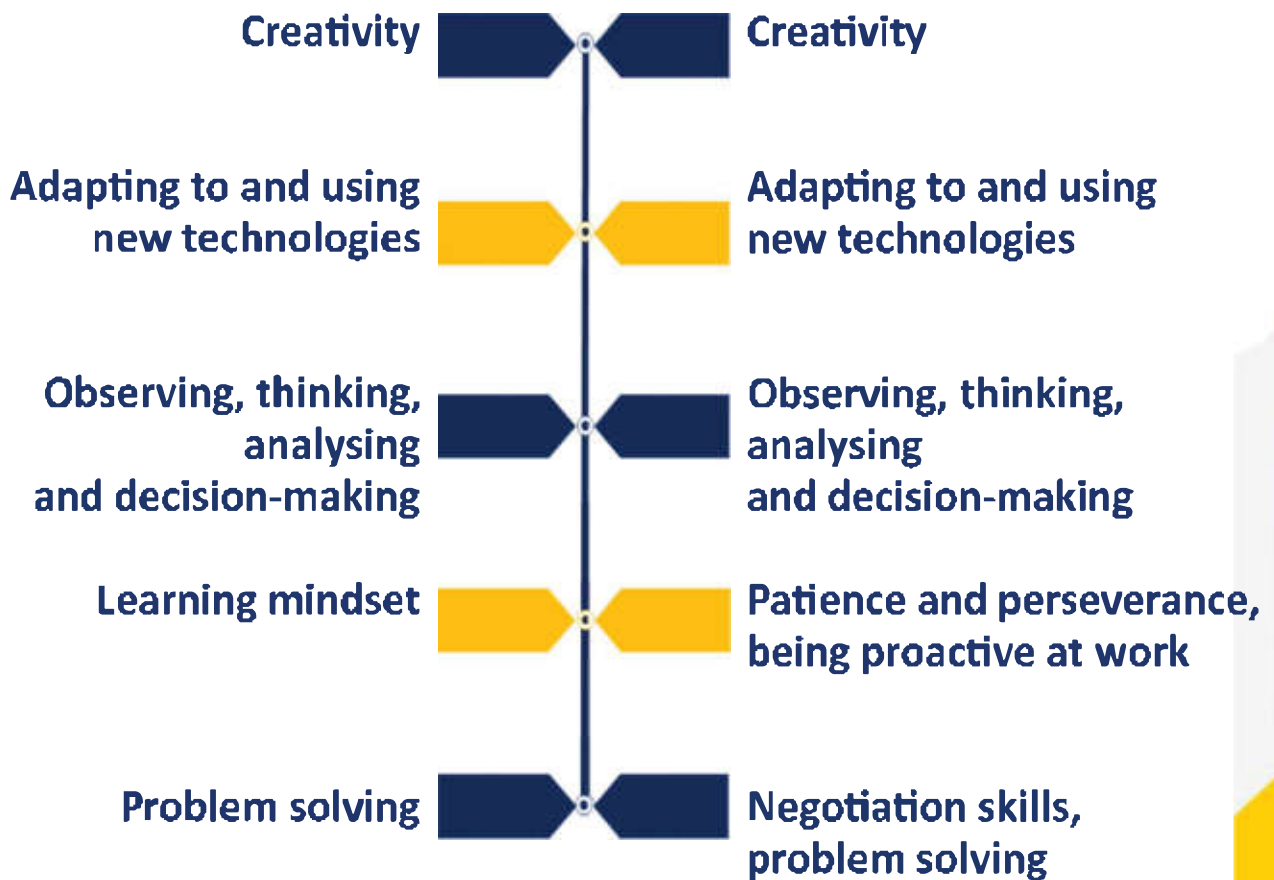
These results stress the importance of training in foreign languages, information technology, and the use of logistics software, and other logistics knowledge and skills for the logistics workforce.

A COMPARISON BETWEEN CURRENT STATUS AND FUTURE DEMAND FOR LOGISTICS WORKFORCE WITH ESSENTIAL ATTITUDES AND CAPABILITIES

The survey results show that in Logistics service providers and Manufacturing enterprises, the demand for workforce in all the essential attitudes and capabilities was greater than the current level of possession. The top 5 serious gaps were in:

Logistics service providers

Manufacturing enterprises



These results highlight the importance of training to develop/build knowledge and skills in observation, thinking, analysis and decision-making, creativity, and adapting to and using new technologies, as well as other essential attitudes and capabilities, for the logistics workforce to perform well in Vietnamese Logistics service providers and Manufacturing enterprises.

Comparing the perceived importance and current level of appropriate logistics knowledge, skills, and other essential attitudes and capabilities, the research team also points out that enterprises need to: (i) maintain knowledge, skills, attitudes and capabilities that have high demand and medium high level of ownership, (ii) build up those which have fairly high demand and medium low level possession, (iii) redistribute resources which have medium demand and medium high level of possession, and (iv) improve those with fairly high demand and medium current level of possession.




RECOMMENDATIONS

Recommendations to the Government of Vietnam and the Prime Minister

-  Develop and promulgate a development strategy for the Vietnam logistics industry in 2021-2030 with orientation to 2050 which recognises logistics human resources development and skills improvement as one of the significant solutions.



-  Develop and promulgate legislative decrees to encourage the participation of enterprises and relevant stakeholders in vocational education and higher education activities, including provisions on cooperation mechanisms between enterprises and vocational education and higher education institutions.



Recommendations to ministries and ministerial-level agencies



The Ministry of Labour, Invalids and Social Affairs, during the development and implementation of the 'Skilling up Vietnam Strategy', should consider the inclusion of logistics skill training and retraining to meet the requirements of the Industrial Revolution 4.0., and also promptly develop and promulgate a set of occupational standards and a national qualifications framework for logistics vocational training that matches ASEAN and international levels.



The Ministry of Labour, Invalids and Social Affairs should encourage training institutions to identify the industry sectors and occupations of high labour demand and short supply, such as: Logistics sales; logistics ICT staff; other job positions of high demand from businesses that are presented in this report.



The Ministry of Industry and Trade should consider and take a leading role in cooperation with the Ministry of Education and Training, and the Ministry of Labour, Invalids and Social Affairs; related Business Associations; the Vietnam Chamber of Commerce and Industry, etc. to design training programs, support the assessment of logistics skills and employment needs and include this information in the annual Vietnam Logistics Report to guide logistics training and recruitment in line with the national and local socio-economic development.



RECOMMENDATIONS

Recommendations to training institutions

Vocational training institutions:

Need to identify high demand job positions for the development of new training packages.

Actively engage with enterprises to enable student access to on site practical opportunities and work based learning.

Training institutions, when writing new or updating existing curriculum, should consider the competency profiles suggested in this report.



Recommendations to enterprises

- Refer to the competency profiles and industry development trends highlighted in this report to develop a workforce development strategy in alignment with the enterprise's overall development strategy.
- Actively cooperate with training institutions in workforce training by sharing recruitment needs, knowledge, skills and attitude requirements for specific job positions.

This will also inform regulators to adjust relevant training policies, targets and standards as well as enable training institutions to adjust their training programs to produce quality graduates that satisfy industry demand and development trends.

- The proactive and substantive participation of enterprises in training activities starting from the development of occupational standards, provision of work based learning opportunities, training program development and assessment will, in turn, help to solve their labour shortages in production and growth.





This report is aimed to provide latest updates on the Logistics Industry Skills Forecast Report for the period 2021-2023 (Logistics Industry Reference Council - LIRC, 2021).



In this report, business, environmental, social and geopolitical trends, as well as technologies that affect logistics operations beyond 2023 will be updated, and the impacts that lead to changes in knowledge, skills and attitudes/abilities of logistics workforce will be evaluated.

Based on this, the competency profile of logistics workforce in the new era will be updated, and some conclusions and recommendations will also be provided to government agencies, businesses and training institutions to ensure that logistics workforce in Vietnam are best prepared to meet market demand.

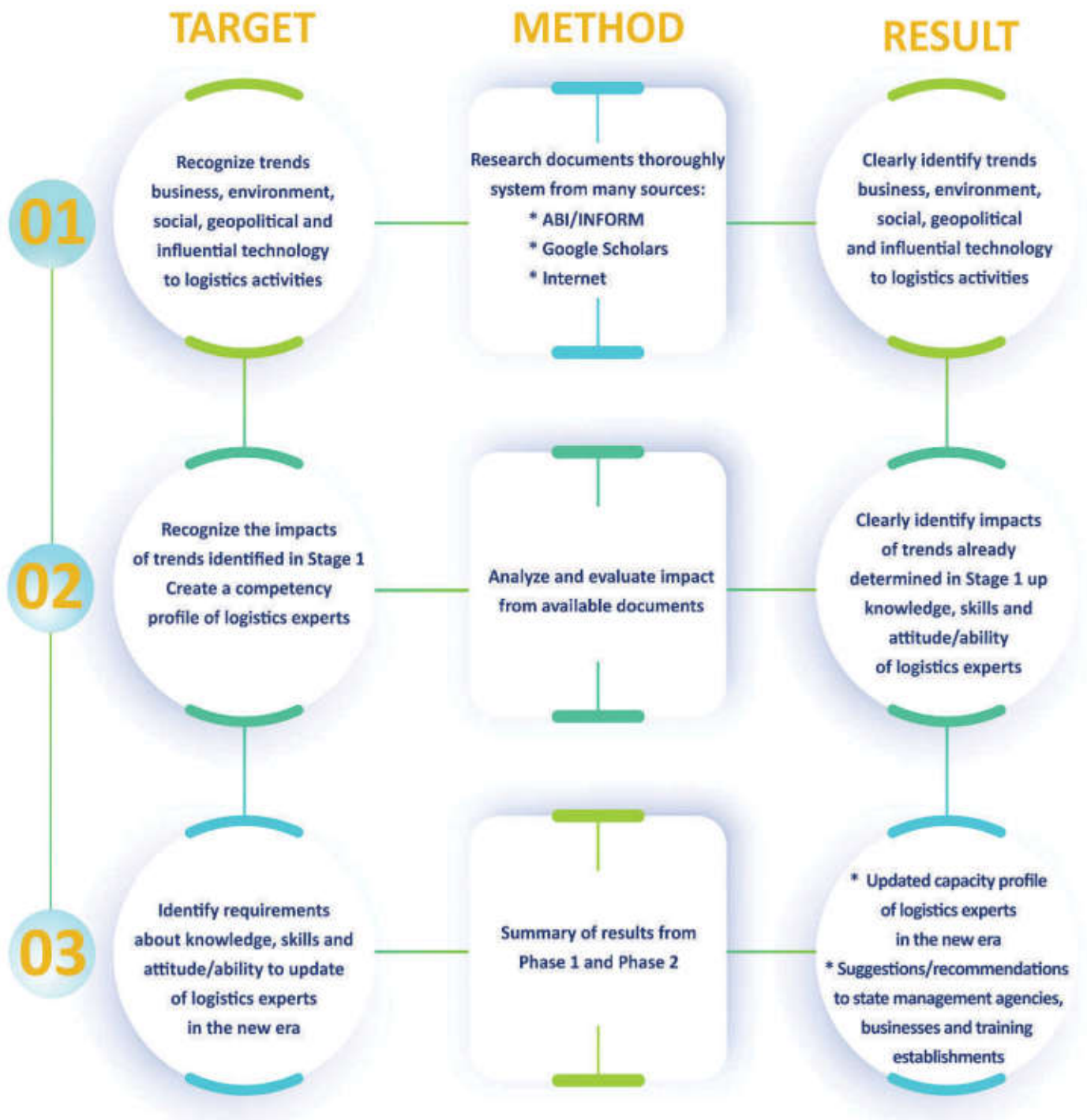




METHODOLOGIES

The updated Vietnam's Logistics Industry Skills Forecast Report was prepared in three steps as follows:

A summary of methodologies





OVERVIEW OF TRENDS THAT WILL IMPACT THE LOGISTICS INDUSTRY BEYOND 2024

Business trends

Logistics and supply chain play a key role in providing support services to all other economic sectors.

The well-established objectives of logistics and supply chain management are to create value for customers through a series of activities, including supply chain optimization and cooperation between internal and external members of supply chains, in addition to traditional activities such as order management, purchasing, transportation, warehouse management, inventory management and customer services (Min et al., 2019). This important role of logistics and supply chain management remains relevant today and even in the coming decades beyond 2024.



Logistics and supply chain management must be transformed to accommodate the growth of e-commerce and to provide customers with faster and more convenient delivery options.

With the development of e-commerce, there have been significant changes to last-mile delivery in terms of technology application and collaborations to increase supply chain responsiveness.





OVERVIEW OF TRENDS THAT WILL IMPACT THE LOGISTICS INDUSTRY BEYOND 2024

Social and geopolitical trends

The structure and operating methods of logistics and supply chains have undergone some changes under the influence of these trends in order to improve their adaptability, flexibility, agility, improvisation and resiliency, and further create value for customers.



The ongoing conflict in Ukraine has exacerbated pre-existing supply chain crises, contributing directly to rising fuel and food prices. This has pushed the global supply chain into a deeper crisis.



The Houthi attacks in the Red Sea have caused huge impacts on the global economy and supply chain.

Environmental trends

It's been recently targeted that the logistics industry and supply chains should become greener and more sustainable as part of the circular economy, and this will be like so beyond 2024 so as to achieve the net-zero goal by 2050.

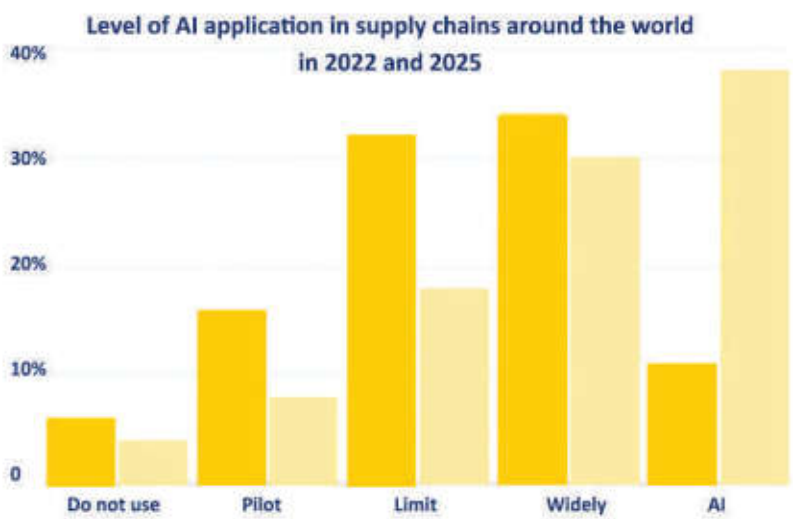


Technology trends

Advanced technologies are revolutionizing logistics and supply chain industry. "Smart" supply chains are becoming more and more common thanks to artificial intelligence, data analytics, automation, machine learning, the Internet of Things, blockchain and other technologies.

Additionally, several key technologies are transforming the logistics industry by facilitating more connected and efficient supply chains.

Therefore, artificial intelligence application in the logistics and supply chain industry is forecast to skyrocket in the next few years.



Technology trends in the logistics and supply chain industry



Similar to AI, IoT is also a game-changing technology in the logistics sector.

IoT devices such as sensors, RFID chips, and GPS trackers provide real-time data on the location and status of goods throughout the supply chain



THE IMPACT OF BUSINESS, ENVIRONMENTAL, SOCIAL, GEOPOLITICAL AND TECHNOLOGICAL TRENDS ON LOGISTICS SKILLS DEMAND

Smart Logistics
or Logistics 4.0

Information and communications
technology (ICT)

01

02

The above technology,
business, environmental,
social and geopolitical trends
impact the competency
profile of logistics workforce
in the new era

04

03

Smart factories
apply technology such as AI

The Internet of Things (IoT)





Other essential competencies include understanding and use of logistics software, multitasking, contingency planning and interoperability (whereby machines, equipment, sensors and humans connect and communicate through IoT).

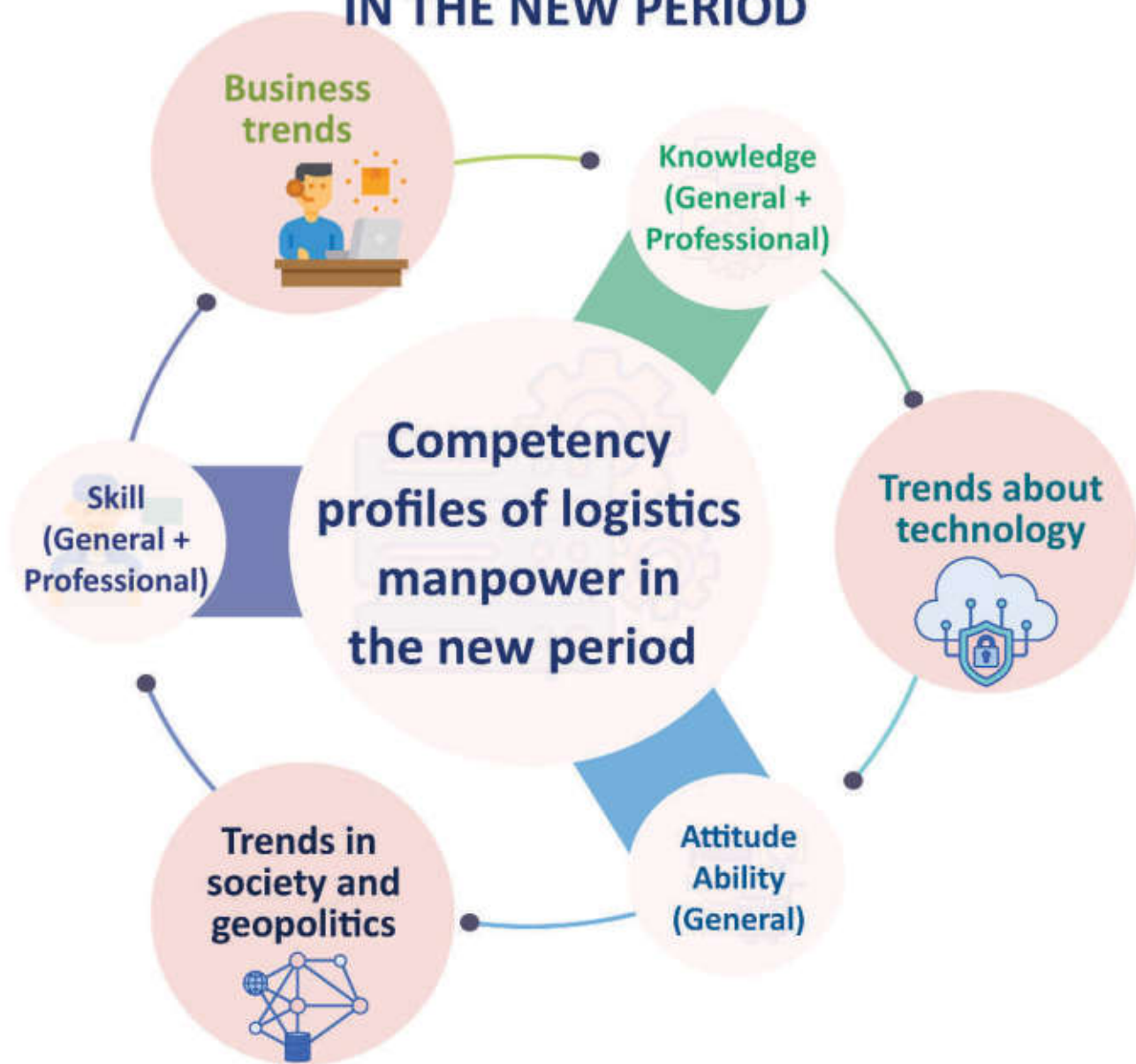
After the COVID-19 pandemic, the requirement for other key logistics competencies has also emerged in specific contexts, such as supply chain collaboration for humanitarian logistics (Fard and Papier, 2023), or automation knowledge, technical skills, and supplier relationship management, among other competencies, to respond to strategic changes needed for the improvement of supply chain resilience.

Sustainable development is another notable driver of change that has an influence on the competencies of logistics workforce in the new period. Key competencies relevant to sustainable purchasing and supply management, such as supplier relationship management and basic knowledge on environmental protection and sustainable development.

Overall, the above mentioned technological, business, environmental, social and geopolitical trends will have a huge impact on the future of work and competency requirements in all economic sectors, including logistics and supply chain.

Accordingly, some traditional jobs will gradually disappear while new jobs will be created and job-related competency profiles will also change accordingly.

UPDATE ON THE DEMAND FOR LOGISTICS MANPOWER AND COMPETENCY PROFILES OF LOGISTICS WORKFORCE IN THE NEW PERIOD



Update the competency profile of logistics manpower in the new period

Group	Capacity	
Knowledge and skill	<ul style="list-style-type: none">Skills in planning and operating vehicles and equipmentKnowledge of order management and customer serviceKnowledge of purchasing managementKnowledge of transportation managementKnowledge of reverse logistics managementKnowledge of facilities managementKnowledge of warehouse management, packaging and packaging handlingSkills in using software, understanding and using logistics termsKnowledge of foreign languagesKnowledge of information technology and digital technologyBasic knowledge of artificial intelligence and machine learning applicationsBasic knowledge of robotic automation control applicationsBasic knowledge of Internet of Things applicationsBasic knowledge of risk management and recoveryBasic knowledge of environmental protectionBasic knowledge of sustainable logisticsData processing and analysis skillsSkills in using calculation software	
	Attitude and ability	<ul style="list-style-type: none">Ability to plan workAbility to communicate verbally and in writingAbility to adapt and work independently with high intensityAbility to observe, judge, evaluate situations and solve problemsAbility to multitask and work collaboratively in teamsTime management abilityAbility to adapt and use new technologyCreativity at workAbility to be flexible in workAbility to work persistently and patientlyAbility to negotiate and negotiateAbility to judge emotionsProfessional working attitudeAttitude to learn, be positive and responsible at workHonest attitude at workAttitude to comply with regulations, policies (corporate information security)Attitude to comply with working procedures and labor safetyCustomer-centered attitude in workAbility to deal well with customersAttitude towards work resultsSystems thinking, digitalThe ability to be persistent, resilient, and quickly recover

CONCLUSIONS AND RECOMMENDATIONS



First, the recommendations stated in the Skills Forecast for Vietnam's Logistics Industry in 2021-2023 should continue to be implemented.



Second, the results of implementing the recommendations in the Skills Forecast for Vietnam's Logistics Industry in 2021 - 2023 should be evaluated in an additional study to point out problems and propose action plans for improvement.





Third, vocational education and training institutions (VET) should proactively review current training curriculum and supplement curriculum contents to ensure compatible with the results of this report. In addition, VET institutions also need to proactively promote engagement with businesses to develop industry - led training curriculum.



Fourth, businesses should proactively engage with VET institutions and continuously update on new trends having impact on the competency profiles of logistics industry. They should contribute to updating the training curriculum of VET institutions and provide opportunities for internship and apprenticeship at businesses from the early years of the training programs.



**All references and citations taken from this document
must state the source and credit of
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2021 - 2023**





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