Human Resource and Skill Requirements in the Transportation, Logistics, Warehousing and Packaging Sector

Executive Summary



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Rising investment, rapidly evolving regulatory policies, mega infrastructure projects and several other developments in recent times have driven the Indian logistics market

Key Growth Drivers

Transport and Logistics sub-sector

- 52 percent of the logistics activities currently outsourced and growing rapidly
- Thrust on marquee projects — dedicated freight corridors, DMIC, JNPT container terminal, inland waterways
- Resurgence in manufacturing activities and emergence of organised retail
- GST to be implemented in the next few years

Warehousing sub-sector

- Rapid growth in organised retail, e-commerce, QSR, containerisation, etc.
- Evolution from pure-play traditional service provider's domain to a range of hi-end 3PL and 4PL players
- 100 percent FDI through automatic route
- Rising domestic consumption and increased demand from farmers; rising EXIM trade

Packaging sub-sector

- FMCG expected to grow at over 12 percent CAGR during 2010–2020
- Increasing income levels among consumers makes product affordable and hence, provides scope for innovative packaging to attract consumers to purchase the product.
- Food and beverage, which contributes 85 percent of total packaging user segments, is the biggest driving force

- Rising investment, rapidly evolving regulatory policies, mega infrastructure projects and several other developments in recent times have driven the Indian logistics market, simultaneously, also overcoming infrastructure-related constraints and logistics-centric inefficiency. While traversing this road to development, multiple projects and services have been either at the planning or implementation stage. Such developments have spanned across all modes of transportation and logistics services and have involved active participation from all stakeholders.
- A majority of players in road transportation, which contributes significantly to the transport and logistics sector, have been small entrepreneurs running family-owned businesses. Given their small scale and limited investment capability, most of their investments have been focused on short-term gains — direct and immediate impact on the top line/bottom line of the business being the key decision criterion. As a result, investments that pay off in the longer term, such as those in manpower development, have been minimal historically. Moreover, these businesses are typically tightly controlled by the proprietor and proprietor's family making it unattractive for professionals.
- Poor working conditions, low pay scales relative to alternate careers, poor or non-existent manpower policies and prevalence of unscrupulous practices have added to the segment's woes creating an image of the segment that holds few attractions for those seeking employment.
- While industry players have been incapable of investing in manpower development, the government has also given it inadequate attention. There are very few formal training institutions; however, recent initiatives taken by CII — Institute of Logistics — and logistics-focused courses taught at management institutes are some steps in the right direction.
- With more organised approach towards transport and logistics activities due to emergence of global third-party logistics (3PL) players, the demand for trained employees with specific skill sets is expected to increase in the near future.

Sources: KPMG in India analysis

Demographic characteristics of workforce

Employment clusters identified from current sector level skill gap study*

- The study of employment clusters indicates the emergence of focus geographies for skill development, such as Bangalore.
- While the overall industry does not have clearly defined clusters, sub-sectors, such as warehousing and logistics, have focused clusters around metro regions.
- The districts with maximum employment in the transportation and logistics sector as identified by the NSSO 68th Round Survey are Mumbai, Kolkata, Hyderabad, Delhi and Ahmedabad
- The high growth clusters as identified by NSDC skill gap studies are Mumbai, Kolkata, Hyderabad, Ahmedabad and Bangalore, Surat and Indore.

**Existing employment clusters identified based on NSSO 68th Round (2011–12) and NSSO 67th Round (2010–11) employment-unemployment surveys*

Skill Requirements in the industry

Packaging

- Increase in retail and other allied services creating need to modernize the workforce through up-skilling
- Training in technological changes is a critical skill requirement which could help reduction of costs

Courier services

- The express and courier service in India has been growing at a rapid pace and will outperform the other segments
- Availability of human resource pool is not seen as a challenge considering the flexibility of working hours which attracts part-time employees

Warehousing

- Lower levels of the organizations face high attrition levels though this problem is offset by plenty of cheap and available labour
- Higher levels of operations require well-trained professionals in supply chain and logistics operations

Incremental human resource requirement (2013-17, 2017-22) and skill gaps

Workforce is expected to reach 28.40 million by 2022

- The sector currently employs over 16.74 million employees and is slated to employ more than 28.4 million employees by 2022. This implies additional creation of ~11.7 million jobs in the nine-year period.
- The period 2013–17 will see a marginally higher growth in employment vis-a-vis 2017–22 due to expected increase in level of automation in logistics and warehousing operations leading higher productivity levels of workforce.

	Employment (in Million)			Employment growth 2013–17	Employment growth 2017–22
	2013	**2017**	**2022**	**(In million)**	**(In million)**
Courier services	0.23	0.30	0.36	0.07	0.06
Packaging	0.22	0.26	0.30	0.04	0.04
Passenger railways	0.83	1.11	1.35	0.28	0.24
Passenger transport roadways	9.10	12.59	15.60	3.49	3.01
Rail freight	0.13	0.18	0.22	0.05	0.04
Road freight	5.79	7.99	9.88	2.20	1.90
Warehousing	0.43	0.57	0.69	0.14	0.12
Total	**16.74**	**23.00**	**28.40**	**6.26**	**5.41**

Workforce level	Common skill gaps
Entry-level — (Truck/bus drivers, fork lift operators, commercial vehicle drivers, warehouse supervisor, logistics administrator, invoicing clerk, courier sorter and warehouse picker)	▪ Gaps in core technical skills ▪ Knowledge of associated issues — VAT, loading supervisory skills etc. ▪ Sanitation and hygienic issues due to inadequate knowledge about the health issues
Middle-level (Inventory controller, transport scheduler, import / export officer, shift supervisor, logistic supervisor, warehouse supervisor, IT Officer)	▪ Gaps in leadership/supervision skills leading to efficiency and monitoring issues ▪ Gaps in good basic management practices — not attractive for professionals; basic in-house experience-driven skills with no formal infrastructure to impart skills; lack of specialised knowledge of best warehousing practices
Top-Level (Warehouse manager, operations manager, purchasing manager, supply chain manager, inventory analyst, contract manager, import/export manager)	▪ IT skills, data and analytic skills for systems and solutions that are both digital and physical ▪ Ability to work with both the mechanical and digital aspects of complex integrated products and services — both in the servicing them and in the development of new solutions ▪ Lack of leadership

Select training infrastructure for the sector

Name	Locations
Indian Institute of Management (IIMs)	Various
CII — Institute of Logistics	Chennai and in various places
National Institute of Logistics and Material Management, Udaipur (Rajasthan)	Udaipur
Indian Institute of Materials Management, Chennai (Tamil Nadu)	Chennai
Karunya School of Business, Leadership and Management, Coimbatore (Tamil Nadu)	Coimbatore
St. Xaviers College (SXC), Kolkata (West Bengal)	Kolkata
Institute of Logistics and Aviation Management (ILAM), Mumbai (Maharashtra)	Mumbai
Institute of Logistics and Aviation Management (ILAM), Bangalore (Karnataka)	Bengaluru
Southern Academy of Maritime Studies, Thiruvallur (Tamil Nadu)	
Global School of Foreign Trade, Madurai (Tamil Nadu)	Madurai
Guiders Academy, Kochi (Kerala)	Kochi
Indian Institute of Logistics, Kochi (Kerala)	Kochi
Ashok Leyland — DTIs	Namakkal, Burari, Chhindwara, Kaithal, Bhubaneswar
Tata Driving School	Various
Volvo truck training	Bengaluru
CRISIL	Various

- Institutes offer a wide variety of courses, which includes undergraduate, postgraduate, diploma and certificate courses in areas, such as supply chain management, warehousing and transportation.
- Innovative training techniques and methods should be thought off to better manage and up skill the manpower to meet the changing needs of the industry.
- Specialised training institutes that cater to the needs of the industry should be developed and focussed on skilling of manpower.
- Technical courses for packaging and the new development technologies should be addressed with the combined efforts with the industry.
- Though few industries have come in to cater to the key requirements in the road segment, some segments — warehousing, supply chain and packaging — have not been specialised.

Source: KPMG in India analysis

Select recommendations & implications

Recommendation	Implications
Consolidation, integration and organisation of industry	▪ Though certain large players have gone in for consolidation by taking over smaller players, it becomes of prime importance for the industry to move from unorganised to organised. ▪ Initiatives by the government for continued liberalisation of foreign investment will enable MNCs establish larger scale and best practice-driven outsourced logistics.
Customisation and development of processes and systems	▪ A successful supply chain shares data between multiple parties — manufacturers, customs departments, logistics providers and retailers. ▪ Industry should take initiatives in the development of processes and systems to basically control costs, streamline the existing processes to ensure efficient flow of operations and monitoring of process. ▪ The high performers have moved well beyond using IT merely as an enabler of internal process management. Instead, they leverage their proprietary customer-facing technologies to empower their customers. The ability to develop more 'intelligent' services, more dynamic planning and increased alignment with customers' operations and processes will be important to the ongoing success.
Initiatives to make the Industry lucrative to attract more manpower	▪ Greater investment is required from industry players in employee welfare and ensuring the basic safety systems are in place. ▪ A closer look at pay and progression policies is also warranted given that the growth and profitability outlook for the industry is positive, sharing the benefits of growth with employees would be important. ▪ While implementing these improvement initiatives is critical, it is equally important to communicate improvements to the target group of recruits. This exercise can be effectively carried out by industry associations in respective segments in association with external advertising agencies. ▪ Formulate policies to encourage training spend by the companies. Create directions to improve work conditions in the sector.
Government initiatives to develop infrastructure for the growth of the industry	▪ Development of enabling infrastructure will create the base for achievement of greater scale efficiencies. ▪ Encouragement of public private partnerships will ensure a faster pace of enabling infrastructure development.

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