

Skill Requirements for Logistics Professionals in the Apparel Industry of Bangladesh: An Importance-Expertise Matrix Analysis

Md Arif Iqbal and Jin Su, The University of North Carolina at Greensboro, USA
Sabbir Hasan, Bangladesh University of Textiles

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Introduction. Ready-Made Garments (RMG) and the textile industry are the largest business sectors of Bangladesh. Bangladesh exported an amount of \$40.535 billion in the fiscal year of 2018-19 and around 84 percent (\$34.133 billion) of this total export income came from RMG (Bangladesh Bureau of Statistics, 2019; Export Promotion Bureau of Bangladesh, 2019). The real GDP of Bangladesh was increased by 8.13 percent in the fiscal year of 2018-19 whereas it grew by 7.86 percent in the fiscal year of 2017-18. To upsurge more modernization and economic progress of Bangladesh, the implementation of an efficient logistics system is very important (Russell & Hoag, 2004). Supply chain management is the management of upstream and downstream relationships with suppliers and customers, and professionals of logistics need comprehensive knowledge and skills to coordinate the interconnected functions of logistics and supply chain systems (Rahman & Yang, 2012). Logistics professionals who are successful must have proficiency in managing logistics functions as well as to manage and lead people in a multicultural and complex environment (Tate, Ellram, & Kirchoff, 2010). Lack of highly skilled logistics professionals is a global problem; not a problem of only the apparel industry of Bangladesh. But this problem is especially significant for Bangladesh due to the rapid development (Ali, Kaur, & Saucedo, 2019) in Bangladesh's apparel industry and the industry's leading role in the country's economic development. Despite the critical role of logistics (Agyabeng-Mensah, Ahenkorah, & Agnikpe, 2019) in Bangladesh apparel industry, there is no or little research on examining necessary skillsets for apparel industry professionals in Bangladesh. To fill the gap, the purpose of this study is to identify the skills required by logistics professionals in the apparel industry in Bangladesh. The study also discusses the main skill areas that might require to progress.

Literature Review. There are a lot of areas to improve to attain the highest level of efficiency (Heaslip et al., 2019) in each step of the supply chain and it is very important to recruit and train professionals with the latest skillsets (Pekkanen, Niemi, Puolakka, Pirttilä, & Huiskonen, 2019). To ensure substantial development in logistics, not only infrastructural development but also highly skilled and qualified employees are required. According to Murphy & Poist (1991, 2006), logistics managers are required to be experts in three areas of skills: management skills, business skills, and logistics skills. Gammelgaard and Larson (2001) indicated a three-factor model of supply chain management skills for logistics managers: managerial/interpersonal basic skills, technological/quantitative skills, and supply chain management core skills. They pointed out the significance of effective communication skills for logisticians, including both downward and upward communication within the organization, as well as being able to communicate across functions and organizations in order to coordinate supply chain management. These studies also indicate that respondents regard themselves as “managers first and then logisticians” with necessary skills and proficiencies that comprise both general management skills and competencies and specific logistics/supply chain skills (Bak, Jordan, & Midgley, 2019) and competencies (Mangan &

Christopher, 2005). Rahman and Yang (2012) conducted a study to identify the relevant skills required and their relative importance for logistics professionals in China. Their analysis discovered that logistics professionals need to further develop their expertise in skills such as demand forecasting and inventory management, warehousing and distribution, conflict management, communication, and language skills (Rahman & Yang, 2012) in order to prepare logistics professionals to tackle potential challenges.

Method. Following Rahman and Yang (2012)'s study, a survey consisting of 40 skill items was used for data collection. The respondents were asked to rate the importance and expertise of items on a scale from 0 to 5; such as No importance (0) to Very important (5) and No skill (0) to Expert (5) respectively. In this research, the term "importance" denotes how important the skills are to perform supply chain and logistics functions efficiently as perceived by the respondents, whereas "expertise" denotes how competent the respondents believe to possess in these skills. The respondents were chosen from the professionals involved in all aspects of logistics and working in national and multinational organizations in Bangladesh. 44 top and mid-level managers and executives were approached, but the survey resulted in 35 responses, a response rate of 80%. Given the limited sample size, the results of this study should be considered exploratory. The 35 respondents represented a total of 20 organizations. The categories of the firms' businesses include knit composite factories (6), local and foreign woven RMG factories (3), denim factories (2), liaison office of multinational brands (3), sweater sourcing liaison offices (1), garments accessories company (1), local sourcing companies (4). This study used the method of an importance-expertise matrix (IEM) analysis, which was adapted from Martilla and James (1977)'s importance-performance matrix. Martilla and James' importance-performance matrix is one of the more widely known gap-based methods. It is a highly flexible technique.

Results and Conclusions. The respondents of the survey are the managers and executives who were engaged in logistics operations in various departments including the departments of merchandising, planning, procurement, production coordinator, commercial procurement, project coordination, and supply chain. Using expert opinions, the 40 skill items were grouped to create two higher-level logistics skill categories: a hard skill category and a soft skill category. Ten most important skills were identified, including time management, communication skill (verbal), ability to plan and prioritize, communication skill (written), customer focus, decision making, negotiation skill, business process improvement, inventory management, supply chain design. Then an importance-expertise matrix (IEM) analysis was conducted on all those 40 skill items. The gap between importance and expertise of a specific skill indicates its strength or weakness. IEM analysis indicated 11 critical skill gaps including communication skill (verbal), environmental issues, negotiation skill, networking skill, supply chain design, foreign language, team orientation, inventory management, conflict management, etc. The analysis revealed that in order to prepare logistics professionals to face future challenges, they need to further develop their expertise and fill these skill gaps. Two skill items, 'time management' and 'ability to plan & prioritize', were found as top two expertise the Bangladesh respondents believed to possess.

This study provides an assessment of skills required by logistics professionals in Bangladesh. The study provides insights to apparel industry professionals in Bangladesh by identifying the skills

required for successful logistics professionals in Bangladesh and suggests the key skill areas that require improvement. The academic may get guidance to set the curriculum to educate students and prepare the future workforce as industry experts in Bangladesh.

References

- Agyabeng-Mensah, Y., Ahenkorah, E. N. K., & Agnikpe, M. C. G. (2019). The Intermediary Role of Supply Chain Capability Between Supply Chain Integration and Firm Performance. *Journal of Supply Chain Management Systems*, 8(2), 32–44. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=138765369&site=ehost-live>
- Ali, S. S., Kaur, R., & Saucedo, J. A. M. (2019). *Best practices in green supply chain management: A developing country perspective*. Emerald Publishing Limited.
- Bak, O., Jordan, C., & Midgley, J. (2019). The adoption of soft skills in supply chain and understanding their current role in supply chain management skills agenda: A UK perspective. *Benchmarking*, 26(3), 1063–1079. <https://doi.org/10.1108/BIJ-05-2018-0118>
- Bangladesh Bureau of Statistics. (2019). Bangladesh Bureau of Statistics-Government of the People's Republic of Bangladesh. Retrieved October 24, 2019, from <http://bbs.gov.bd/>
- Export Promotion Bureau of Bangladesh. (2019). Export Promotion Bureau of Bangladesh-Government of the People's Republic of Bangladesh. Retrieved October 24, 2019, from <http://www.epb.gov.bd/>
- Gammelgaard, B., & Larson, P. D. (2001). Logistics skills and competencies for supply chain management. *Journal of Business Logistics*, 22(2), 27–50. <https://doi.org/10.1002/j.2158-1592.2001.tb00002.x>
- Heaslip, G., Vaillancourt, A., Tatham, P., Kovács, G., Blackman, D., & Henry, M. C. (2019). Supply chain and logistics competencies in humanitarian aid. *Disasters*, 43(3), 686–708. <https://doi.org/10.1111/disa.12361>
- Mangan, J., & Christopher, M. (2005). Management development and the supply chain manager of the future. *The International Journal of Logistics Management*, 16(2), 178–191. <https://doi.org/10.1108/09574090510634494>
- Murphy, P., & Poist, R. (1991). Skill Requirements of Senior-Level Logistics Executives: an Empirical Assessment. *Journal of Business Logistics*, 1, 73–95.
- Murphy, P. R., & Poist, R. F. (2006). Skill requirements of contemporary senior- and entry-level logistics managers: A comparative analysis. *Transportation Journal*, 45(3), 46–60.
- Pekkanen, P., Niemi, P., Puolakka, T., Pirttilä, T., & Huisken, J. (2019). Building integration skills in supply chain and operations management study programs. *International Journal of Production Economics*, (October 2018). <https://doi.org/10.1016/j.ijpe.2019.107593>
- Rahman, S., & Yang, L. (2012). Skill Requirements for Logistics Professionals in China : An Importance-Expertise Matrix Analysis Skill Requirements for Logistics Professionals in China : An Importance-. *Supply Chain Forum: An International Journal*, 13(2), 40–52. <https://doi.org/10.1080/16258312.2012.11517291>
- Russell, D. M., & Hoag, A. M. (2004). People and information technology in the supply chain: Social and organizational influences on adoption. *International Journal of Physical Distribution & Logistics Management*, 34(2), 102–122. <https://doi.org/10.1108/09600030410526914>
- Tate, W., Ellram, L., & Kirchoff, J. (2010). Corporate social responsibility reports: A thematic analysis related to supply chain management. *Journal of Supply Chain Management*, 46(1), 19–44.