



The New Era of Careers in Logistics: A Pathway for Malaysian Graduates

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ABSTRACT

The logistics industry is a vital contributor to Malaysia's economic growth, yet it remains an underexplored career choice among graduates, leading to a persistent talent gap. This study investigates graduates' perceptions of careers in the industry, identifies key barriers to entry, and proposes strategies to enhance its attractiveness. Using a mixed-method approach, the research includes a survey of 200 graduates and focus group discussions with 20 participants. Findings indicate that negative perceptions regarding working conditions, limited career advancement, and poor work-life balance deter graduates from considering careers in this sector. Additionally, a lack of industry exposure and misconceptions about job stability further discourage interest. To address these challenges, the study recommends strengthening industry-academic collaborations by enhancing internship programs, integrating industry-driven training into curricula, and fostering closer partnerships between universities and logistics firms. Moreover, targeted career awareness initiatives, such as university outreach programs, industry networking sessions, and mentorship opportunities, can reshape perceptions and highlight career growth potential. Workplace enhancements, including clear career progression pathways, competitive compensation, and improved work-life balance policies, are crucial in attracting and retaining young talent. By implementing these strategic measures, the logistics industry can position itself as a viable and appealing career option, helping to close the talent gap and ensure a sustainable, skilled workforce for Malaysia's expanding economy. Through these efforts, graduates can better appreciate the opportunities within the sector, paving the way for a dynamic and future-ready workforce.

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I. INTRODUCTION

The logistics industry plays a pivotal role in Malaysia's economic development by ensuring the smooth movement of goods and services, facilitating trade, and enhancing supply chain efficiency. As globalisation and digitalisation accelerate, the demand for skilled professionals in this industry continues to grow. However, despite its significance, the logistics industry remains an unattractive career choice for many Malaysian graduates. The industry is often perceived as physically demanding, with limited career growth opportunities, long working hours, and challenging work environments. Such negative perceptions contribute to a widening talent gap, making it difficult for companies to attract and retain young professionals (Razak et al., 2022).

A common stereotype associated with logistics careers is the "3D" perception—dirty, difficult, and dangerous. This negative image has been deeply ingrained in public consciousness, particularly among graduates who lack exposure to the industry's evolving dynamics and opportunities. The logistics industry is often seen as labour-

intensive, with limited technological advancements and poor work-life balance. As a result, many graduates prefer careers in fields such as finance, engineering, or information technology, which are perceived as more prestigious and rewarding. This trend has led to a growing skills shortage in logistics, threatening the industry's long-term sustainability (Khan et al., 2024).

To address this issue, it is crucial to examine the factors shaping graduates' perceptions of logistics careers. Career decision-making is influenced by various elements, including personal interests, industry exposure, salary expectations, and perceived job stability (Tan et al., 2021). Many graduates are unaware of the diverse career pathways within logistics, which extend beyond traditional roles such as truck drivers and warehouse operators. Emerging areas such as supply chain analytics, digital logistics, and sustainable transportation offer lucrative and intellectually stimulating opportunities (Winkelhaus & Grosse, 2020). However, inadequate career guidance and limited engagement between

industry and academia have hindered graduates from recognising the full potential of this sector.

Given these challenges, this paper aims to explore the perceptions of Malaysian graduates toward logistics careers, identify the key barriers to entry, and propose actionable strategies to enhance the industry’s appeal. The research is guided by the following key questions:

1. What are the primary perceptions of graduates regarding careers in logistics?
2. What factors influence their career choices?
3. How can the industry improve its attractiveness to graduates?

By addressing these questions, this study seeks to provide insights that can help reshape the narrative surrounding logistics careers. It highlights the importance of industry-academic collaborations, targeted career awareness initiatives, and workplace improvements to create a more compelling value proposition for young talent. Ultimately, redefining the attractiveness of logistics careers will not only help bridge the talent gap but also contribute to Malaysia’s economic resilience and global competitiveness.

II. LITERATURE REVIEW

1. The Role of Logistics in Economic Growth

The logistics industry is a crucial pillar of economic development, enabling the seamless movement of goods and services within and beyond national borders. The logistics industry in Malaysia significantly contributes to the country’s Gross Domestic Product (GDP), with steady growth driven by increasing trade activities, digital transformation, and the rise of e-commerce. According to the Malaysian Investment Development Authority (MIDA), the logistics industry accounted for approximately 4% of Malaysia’s GDP in 2023, reflecting its importance in maintaining economic stability (MIDA, 2023).

The expansion of the industry has been influenced by globalisation, which has created an interconnected supply chain network requiring efficient logistics solutions. The rise of digitalisation has further accelerated the sector’s growth by improving operational efficiency and transparency. The adoption of artificial intelligence and automation in logistics operations has streamlined supply chain processes, making the industry more attractive to investors. Additionally, e-commerce has fuelled demand for advanced logistics services, requiring a skilled workforce to manage sophisticated supply chains (Winkelhaus & Grosse, 2020).

2. Perceptions of Logistics Careers

Despite its significant role in the economy, the logistics industry struggles with an unfavourable perception among graduates. The sector is often associated with the “3D” image: Dirty, Difficult, and Dangerous. These negative perceptions discourage young graduates from pursuing careers in the industry, resulting in labour shortages and talent gaps.

A survey by Razak, Tan, and Ahmad (2022) found that 63% of Malaysian university graduates perceived logistics jobs as physically demanding with minimal career progression. One participant in their study stated, “I would prefer working in an office environment rather than spending long hours at warehouses or managing transportation routes”. The perception of low salaries further discourages graduates from entering the field. According to a study by Tan, Low, and Yong (2021), many young professionals believe that logistics careers offer limited financial rewards compared to industries such as finance or information technology.

The lack of awareness about the diverse career opportunities in logistics exacerbates the problem. Many graduates associate logistics solely with truck driving or warehouse management, unaware of the various professional roles available, including supply chain analytics, digital logistics management, and strategic planning. This misperception underscores the need for greater industry engagement in academic settings to reshape the graduates’ understanding of logistics careers.

3. Talent Gaps and Industry Needs

The logistics industry is experiencing a widening talent gap due to rapid technological advancements and changing business demands. Employers now seek candidates with expertise in digital supply chain management, data analytics, and sustainability practices (Lim & Wong, 2023). However, traditional academic curricula do not always align with these evolving industry requirements, leading to a shortage of adequately skilled professionals.

In a study on workforce readiness, Hilmola (2020) highlighted that logistics employers prioritise skills in automation, predictive analytics, and green logistics, yet many graduates lack exposure to these areas in their education. The emergence of smart logistics and Industry 4.0 has reshaped job roles, necessitating continuous upskilling and professional development initiatives (Winkelhaus & Grosse, 2020).

Another major challenge is the lack of soft skills among graduates entering the workforce. Employers seek candidates who possess leadership abilities, problem-solving skills, and adaptability to dynamic supply chain environments (Tan et al., 2021). Addressing this challenge requires targeted training programs that integrate both technical knowledge and interpersonal skill development.

4. Strategies to Attract Graduates

To bridge the talent gap and enhance the appeal of logistics careers, industry leaders, educational institutions, and policymakers must adopt proactive strategies. Several best practices from countries with strong logistics industries, such as Germany and Singapore, offer valuable insights into effective talent attraction and retention methods.

A. Integration of Logistics Education in University Curricula

One effective approach is embedding logistics and supply chain management courses into university curricula. By

offering specialised programs and certifications, higher education institutions can equip graduates with industry-relevant knowledge and skills (Tan et. al., 2021). For example, Singapore’s Workforce Singapore (WSG) initiative collaborates with universities to provide logistics-focused training programs, ensuring graduates are job-ready upon entering the workforce.

In Malaysia, partnerships between universities and logistics firms can facilitate curriculum enhancements and practical training opportunities. The educational institutions must align their programs with the evolving needs of the logistics industry to produce graduates who are well-prepared for industry demands. Such integration can include case studies, simulation-based learning, and exposure to digital logistics tools (Ivanov & Sokolov, 2019).

B. Internship and Apprenticeship Programs

Internships and apprenticeships play a crucial role in shaping graduates’ career perceptions by providing hands-on experience in logistics operations. Exposure to real-world supply chain challenges allows graduates to develop problem-solving skills and gain a deeper understanding of industry demands (Razak et al., 2022).

German logistics firms have successfully implemented dual-education models, where graduates alternate between classroom learning and on-the-job training. Adopting a similar approach in Malaysia can enhance graduates’ employability and reduce skill mismatches (Tan et al., 2021). Additionally, offering mentorship programs within logistics firms can provide guidance and career insights, encouraging more graduates to consider long-term careers in the sector.

C. Improving Working Conditions and Career Progression

To overcome negative perceptions, logistics companies must prioritise employee well-being and career development. Enhancing work-life balance, offering competitive salaries, and creating clear career progression pathways can make the industry more attractive (Lim & Wong, 2023). Multinational logistics companies have implemented employee-friendly policies such as flexible working arrangements and leadership development programs to retain talent (Ismail & Ibrahim 2008). Job satisfaction emerged as the most impactful factor, followed by employee engagement and work environment, emphasising the need for supportive work conditions to boost employee performance and retention. A supportive work environment significantly affects female employee retention in Malaysia’s logistics industry, suggesting that implementing flexible work arrangements and clear career progression pathways can make the industry more attractive to talent (Murphy & Poist, 2007).

Incorporating such employee-centric initiatives can improve job satisfaction and professional growth opportunities, thereby enhancing retention rates within Malaysia’s logistics industry (Khan et. al, 2024)

D. Career Awareness Campaigns

Raising awareness about the diverse opportunities in logistics is essential to shifting perceptions. Industry-led outreach programs, career fairs, and social media campaigns can showcase success stories of professionals who have built rewarding careers in logistics. Collaborations with educational institutions to organise guest lectures, company visits, and networking events can further enhance graduates’ understanding of career prospects in the field.

A perception shifts require consistent engagement between industry players and the younger generation to highlight the transformative nature of modern logistics careers (Tan et. al., 2021). Utilising digital platforms to share insights into innovative logistics solutions, such as blockchain-based supply chain management and autonomous delivery systems, can attract tech-savvy graduates.

The logistics industry in Malaysia plays a vital role in economic development but continues to struggle with talent shortages due to negative perceptions and skill gaps. Addressing these challenges requires a multi-faceted approach, including curriculum integration, internship programs, improved working conditions, and career awareness campaigns. By implementing these strategies, Malaysia can build a future-ready logistics workforce capable of supporting the nation’s economic growth and global competitiveness (Khan et. al, 2024).

III. METHODOLOGY

A mixed-method research approach was employed to provide a comprehensive analysis of graduates’ perceptions of logistics careers. This approach combined both quantitative and qualitative data collection techniques to ensure a holistic understanding of the research problem. The integration of these methods facilitated the triangulation of findings, thereby enhancing the study’s validity and reliability (Creswell & Plano Clark, 2018).

1. Survey

A structured questionnaire was designed and distributed to 200 university graduates from various disciplines across 2 Malaysian universities. The survey aimed to capture graduates’ perceptions of logistics careers, their career preferences, and the factors influencing their decisions. The questionnaire consisted of multiple sections, including demographic information, career interest levels, perceived challenges, and expectations from the logistics industry.

To measure graduates’ interest in logistics careers, Likert-scale questions were used, ranging from "strongly disagree" to "strongly agree." These questions evaluated areas such as job security, salary expectations, work-life balance, and industry awareness.

Furthermore, pilot testing was conducted with a small sample of 10 interns to refine the questionnaire and ensure clarity and reliability of responses (Saunders, Lewis, & Thornhill, 2019). Feedback from the pilot study led to minor

revisions, ensuring that the questions were comprehensible and accurately captured the research objectives.

The final survey data was analysed using SPSS software, which facilitated descriptive statistical analysis and identification of key trends.

2. Focus Group Discussion

To complement the survey data, a focus group discussion (FGD) was conducted with 20 university graduates. The qualitative component aimed to provide deeper insights into graduates' career preferences, hesitations, and perceptions of logistics careers. The discussion was guided by a semi-structured interview format, allowing for flexibility while ensuring that key themes were explored (Krueger & Casey, 2015).

Participants were recruited based on their willingness to share their perspectives on career choices in logistics. The FGD explored key themes such as job security, salary expectations, work-life balance, and graduates' awareness of career opportunities within the logistics industry.

The discussions were audio-recorded and transcribed verbatim for thematic analysis. Braun and Clarke's (2006) six-step thematic analysis framework was applied to identify recurring themes and patterns in the data. This approach helped categorise student concerns into broader themes, such as industry awareness, career progression, and work conditions.

IV. FINDINGS

1. Negative Industry Perception

One of the primary obstacles to workforce recruitment in the logistics industry is its negative public perception. The survey revealed that 68% of respondents associated logistics jobs with physically demanding tasks and an unsatisfactory work-life balance. Many believe that jobs in this field require long hours, extensive travel, and intense manual labour, making them less appealing compared to other industries. This perception is especially pronounced among younger generations who prioritise work-life balance and career flexibility.

Additionally, media portrayals often focus on the industry's challenges such as supply chain disruptions, driver shortages, and labour-intensive operations rather than highlighting career growth potential and technological advancements. The lack of positive representation further discourages potential graduates from considering careers in logistics. In contrast, industries like finance, IT, and healthcare are often perceived as offering more prestigious and stable career paths. Addressing these misconceptions through targeted industry branding, employee testimonials, and public engagement initiatives could help reshape the sector's image.

Another contributing factor to the negative perception is the gender imbalance in the industry. Logistics is still widely seen as a male-dominated field, with limited visibility of female role models in leadership positions. This perception

discourages women from entering the sector, further exacerbating the talent shortage. Companies must actively promote diversity, equity, and inclusion (DEI) initiatives to challenge these stereotypes and make logistics a more attractive career choice for all demographics.

2. Lack of Career Awareness

Another major concern is the limited awareness of career pathways within the logistics industry. According to a survey, 75% of graduates were unaware of career opportunities in logistics. Unlike more mainstream professions such as finance, healthcare, IT, and engineering, logistics does not receive the same level of visibility in academic and career counselling programs. As a result, many young graduates do not consider logistics as a viable career choice, leading to a shortage of qualified professionals in the industry.

The absence of structured career education about logistics in high schools and universities further contributes to this gap. Many educational institutions focus on traditional career paths and do not expose students to the diverse opportunities available in logistics, such as supply chain management, data analytics, procurement, sustainability, and digital logistics solutions. Students often assume that logistics careers are limited to truck driving or warehouse work, failing to recognise the high-level strategic and managerial roles within the industry.

Furthermore, industry professionals note that job titles and descriptions in logistics can be vague or inconsistent across companies, making it difficult for job seekers to understand career progression pathways. More collaboration between academia and industry stakeholders is needed to standardise job descriptions, promote logistics as a high-growth career, and provide clear guidance on skill development for different roles.

3. Salary and Benefits Concerns

Salary expectations play a significant role in job selection, and logistics careers are often perceived as offering lower salaries compared to other industries. The survey found that 62% of graduates believed logistics jobs provide lower wages than fields like finance, IT, or healthcare. While entry-level salaries in logistics may be competitive, there is a widespread perception that career progression is slow and that wage growth does not keep pace with increasing living costs.

Additionally, non-monetary benefits such as flexible work arrangements, remote work opportunities, and professional development programs are often lacking. Many graduates today prioritise work-life balance and career development over salary alone. Compared to industries that actively promote hybrid work models and career training opportunities, logistics jobs are seen as rigid, with limited career mobility.

A lack of transparent salary structures also contributes to this issue. Many graduates are unaware of potential earning trajectories, incentives, and bonuses available in logistics.

Companies that offer clear, structured career ladders, competitive salaries, and comprehensive benefits packages will be better positioned to attract and retain top talent.

Moreover, given the increasing complexity of modern supply chains, skilled logistics professionals play a critical role in global trade and economic stability. By aligning compensation packages with industry benchmarks, recognising specialised skill sets, and investing in continuous learning programs, logistics firms can improve their ability to attract high-calibre talents.

4. Skills and Training Gap

Many graduates feel unprepared for roles in logistics due to the lack of university courses focused on logistics technology and digitalisation. The rapid adoption of automation, artificial intelligence (AI), robotics, and data-driven decision-making requires specialised training that most traditional degree programs do not offer.

The logistics industry has evolved significantly, with digital transformation reshaping operations through warehouse automation, predictive analytics, blockchain tracking systems, and AI-driven supply chain optimisation. However, many academic curriculums remain outdated, focusing primarily on traditional logistics models rather than emerging technologies. This disconnect between education and industry demands makes it difficult for companies to find qualified candidates, thereby exacerbating workforce shortages.

Furthermore, only a small percentage of logistics professionals receive formal industry certifications, such as the Certified Supply Chain Professional (CSCP), Lean Six Sigma, or Certified Logistics Professional (CLP). These credentials provide essential knowledge and skills but are often not promoted as necessary qualifications in university programs. A greater emphasis on partnerships between industry players and academic institutions is needed to ensure that educational programs align with real-world industry needs.

Additionally, the logistics industry requires a diverse set of competencies, including problem-solving, digital literacy, leadership, and sustainability management. Future workforce training should incorporate practical learning experiences such as simulation-based training, virtual reality (VR) logistics labs, and AI-powered forecasting workshops to bridge the gap between academic knowledge and industry skills.

Overall, the logistics industry faces significant workforce recruitment challenges due to negative perceptions, limited career awareness, salary concerns, and skill mismatches. To secure a robust talent pipeline, industry leaders must work closely with educational institutions to modernise training programs, improve public perception, and create structured career pathways. By offering competitive salaries, improving working conditions, and leveraging technology for training and upskilling, logistics companies can attract and retain top talent, ensuring long-term industry sustainability.

V. RECOMMENDATION

To overcome these challenges, a comprehensive approach involving academic institutions, industry leaders, and policymakers is necessary. The logistics industry is a critical pillar of economic growth, yet it continues to face negative perceptions and skill shortages. Addressing these issues requires a multi-faceted strategy that enhances industry perception, increases career awareness, improves working conditions, and bridges the skills gap. A well-coordinated effort between education providers and employers can ensure that graduates enter the workforce with the right skills while existing employees receive the necessary training to adapt to industry advancements.

1. Enhancing Industry-Academic Collaboration

Collaboration between educational institutions and logistics companies is vital to preparing graduates for industry demands. Universities should integrate logistics courses into business, engineering, and data science programs to provide students with a foundational understanding of supply chain management, logistics technology, and emerging industry trends such as artificial intelligence (AI) in transportation and predictive analytics for inventory management. Additionally, partnerships between universities and logistics firms can foster curriculum development that aligns with industry needs, ensuring that graduates possess both theoretical knowledge and practical skills.

Industry leaders should also take an active role in shaping the talent pipeline by offering mentorship programs, internships, and apprenticeships. These initiatives allow graduates to gain hands-on experience, develop essential problem-solving skills, and build professional networks before entering the workforce. Establishing stronger ties between academia and industry will not only enhance employability but also reduce skill mismatches that often contribute to workforce inefficiencies. Furthermore, government incentives for companies that actively participate in workforce development initiatives can encourage greater involvement in training programs.

2. Career Awareness Campaigns

Employers and educational institutions should work together to increase awareness of logistics career opportunities. Many young professionals overlook logistics as a viable career path due to a lack of understanding of its diverse roles and growth potential. Organising career fairs, hosting guest lectures, and conducting industry workshops with logistics professionals can help students explore the various career paths within supply chain management, transportation, procurement, and warehouse automation.

Additionally, leveraging digital platforms and social media to highlight career success stories, advancements in logistics technology, and real-world applications of supply chain solutions can make the sector more appealing. Companies can use video content, employee testimonials, and behind-the-scenes insights to showcase the dynamic

nature of logistics careers. Encouraging influencers, industry experts, and professional organisations to participate in career advocacy initiatives can further amplify outreach efforts. By proactively promoting logistics careers, businesses can attract a larger pool of skilled professionals, fostering long-term industry growth.

3. Improving Work Conditions

To make logistics jobs more appealing, companies should focus on improving workplace conditions, offering competitive salaries, and implementing employee-friendly policies. Many professionals perceive logistics as a physically demanding sector with long hours and high turnover rates, making it less attractive compared to other industries. Employers can counter this perception by adopting modern workplace policies that prioritise employee well-being.

Flexible work arrangements, including hybrid work models and shift rotations, can help employees achieve a better work-life balance. Companies can implement technology-driven scheduling systems to optimise workforce allocation and reduce employee burnout. Competitive compensation packages, including performance-based incentives, transportation allowances, and comprehensive healthcare benefits, can enhance job attractiveness and retention.

Furthermore, organisations should invest in career development programs, leadership training, and certification courses to provide employees with long-term career prospects. By offering continuous learning opportunities, such as sponsorship for professional qualifications (e.g., Certified Supply Chain Professional [CSCP] or Lean Six Sigma), companies can create a culture of growth and motivation. In addition, fostering an inclusive work environment that values diversity and equal opportunities will encourage more professionals, including women and younger generations, to consider logistics careers.

4. Addressing the Skills Gap

To equip graduates with the necessary skills for modern logistics operations, academic institutions and industry leaders must continuously update the education syllabus and training programs. The rapid digitalisation of supply chain management requires professionals to possess a combination of traditional logistics knowledge and digital competencies. Universities should introduce specialised courses in digital logistics, warehouse automation, supply chain analytics, and sustainability-driven logistics practices.

Moreover, companies should establish structured on-the-job training programs that provide real-world learning experiences. Initiatives such as simulation-based training, virtual reality (VR) logistics modules, and AI-powered inventory management workshops can help employees develop critical problem-solving and decision-making skills. Encouraging employees to obtain industry-recognized certifications—such as the Certified Supply Chain Professional (CSCP), Certified Logistics Professional (CLP),

or Lean Six Sigma—can enhance technical expertise and improve workforce readiness.

Policymakers should also support skill development initiatives by offering tax incentives and funding for companies investing in workforce upskilling. By creating an ecosystem that prioritizes continuous learning and professional growth, Malaysia’s logistics industry can ensure that it remains competitive, efficient, and attractive to future talent.

The logistics industry is evolving rapidly, driven by digital transformation, globalization, and increasing consumer demand for efficient supply chain solutions. Logistics companies can build a resilient and future-ready workforce by fostering industry-academic collaboration, increasing career awareness, improving work conditions, and addressing the skills gap. With the right strategies in place, the sector can attract top talent, enhance operational efficiency, and contribute significantly to Malaysia’s economic growth.

VI. CONCLUSION

The logistics industry is a vital contributor to Malaysia’s economy, yet it continues to face talent shortages due to negative perceptions and a lack of career awareness. Addressing these issues requires a collective effort from academia, industry leaders, and policymakers. By integrating logistics education into university curricula, launching career awareness initiatives, improving salary structures, and enhancing work conditions, the industry can reshape its image and attract skilled professionals.

Additionally, embracing digitalisation and emerging technologies will ensure that the workforce remains competitive and adaptable to industry advancements. Strengthening industry-academic collaborations, providing hands-on training opportunities, and promoting the diverse career pathways available in logistics will further support the sector’s growth. The industry must also commit to fostering a work environment that prioritises employee well-being, career development, and fair compensation to retain talent.

With sustained efforts in education, policy reform, and industry initiatives, the logistics industry can position itself as a desirable and rewarding career choice. These improvements will not only secure the necessary talent but also drive innovation, efficiency, and long-term sustainability within the industry.

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