

Rethinking competency requirements in South African supply chain management

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Background: In the realm of talent acquisition and supply chain management (SCM), the establishment of a standardised competency framework is pivotal. However, a lack of consensus in the supply chain management literature persists regarding the prioritisation of competencies for SCM professional recruitment in South Africa. This necessitates a re-evaluation of SCM competencies to align with the dynamic business environment.

Objectives: To understand the competencies necessary for supply chain professionals in South Africa's SCM job market to inform curriculum development for the training of supply chain profession at higher education institutions.

Method: A qualitative, grounded theory approach was followed. Content analysis was conducted on 29 SCM job advertisements posted on various employment agents' websites. Atlas was then used to create codes and code groups and themes describing the SCM job market needs and expectations.

Results: While technical competencies maintain their significance, strategic thinking and cognitive capabilities are increasing in their importance compared with interpersonal skills in the SCM job market.

Conclusion: The required competencies for SCM roles are evolving, with an increasing emphasis on strategic and cognitive skills rather than just technical abilities. Interpersonal competencies, although still important, are becoming less crucial. Training institutions should adjust their curricula to ensure well-rounded SCM professionals.

Contribution: The literature reflecting the fast evolving nature of SCM competencies is sparse. This study challenges the prevailing narrative that emphasizes technical and interpersonal competencies thereby opening new pathways for curriculum development and professional training of SCM professionals.

Keywords: supply chain management; competencies; technical competencies; strategic competencies; cognitive competencies; interpersonal competencies; curriculum; South Africa.

Introduction

In today's business environment, competition extends beyond individual companies and encompasses the entire supply chain. This requires companies to develop capabilities that enable them to effectively coordinate and optimize different flows of goods, services and information along the chain. Therefore, it is becoming increasingly important for business success to attract people with the necessary skills and competencies. However, while literature demonstrates the value of supply chain competencies to organisational success and longevity, there is still no consensus among academics and industry experts as to which specific competences should be prioritized in supply chain management (SCM) efforts (Asghar et al. 2023; Derwik & Hellström 2017; Karttunen 2018; Sangari & Razmi 2015). In addition, there is uncertainty and ambiguity about the characteristics of these competencies and skills and the approaches used to cultivate and assess them (Gámez-Pérez et al. 2020; Yang, Jia & Xu 2019). This lack of consensus and specificity regarding SCM competencies implies an absence of a standardized SCM competency framework, a conundrum that can significantly lead to inefficiencies in organisational talent acquisition processes (Beske-Janssen et al. 2023; Spada et al. 2022). Inevitably, this poses a significant barrier to organisations in their efforts to select suitable candidates for SCM roles. This has the capacity to hamper the performance of supply chains worldwide, including in South Africa.

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In the South African context, the lack of a clear competency framework for SCM exacerbates talent challenges and hampers alignment with market needs (Ngcamu & Mantaris 2023; Umutohi 2019). This may have dire consequences, particularly for the competitiveness of organisations in South Africa. Clearly, there is a requirement for an investigation to that leads to the establishment of a competency framework for organisations in South Africa on the quintessential competences for their SCM roles (Derwik & Hellström 2017). This study examines the critical SCM competences in South African organisations, with the general aim of adding to existing knowledge and providing practical recommendations for improving the mechanisms for developing the required competences for current and future South African SCM professionals. The article is structured as follows: A review of literature is conducted to provide a theoretical basis for the classification of SCM competencies that are quintessential to effective SCM. The next section describes the methodology and methods used to identify the competencies essential for effective SCM practices in South Africa. In the results section, the required SCM competencies in South Africa are analysed, coded and grouped. Afterward, a critical assessment of the results and their implications is made in the discussion section. Finally, the conclusions, implications and recommendations for developing the quintessential SCM competences in the South African context are presented.

Literature review

Numerous studies have attempted to address human resource questions within the field of SCM, especially regarding the development of a competency framework for supply chain competencies. These studies have focused on creating and evaluating comprehensive competency frameworks to ascertain the significance of various SCM competencies in varying circumstances. The resource-based view (RBV) (Barney 2001) asserts that a firm's competitiveness is determined by its resources and skills. In the context of SCM, competencies can be seen as valuable resources for companies in achieving their strategic goals. Various studies have corroborated this, showing that organisations with adept SCM capabilities are able to effectively navigate complex supply chain processes, promote collaboration, adapt to global market fluctuations and gain competitive advantage. Consequently, there is an increasing emphasis on the attraction and selection of candidates who possess the necessary skills as a means of driving business success. Multiple studies have corroborated the notion that employees possessing superior SCM competencies contribute to strong supply chain performance and a competitive edge. In addition, the human capital theory sheds light on the value of SCM competencies by highlighting how investing in an individual's education, skills and abilities is essential for building necessary human capital that enhances productivity within organisations (Becker 1993; Huo et al. 2016). These findings emphasize the significance of developing SCM competencies as a strategic investment to achieve improved organisational performance and gain a competitive advantage.

In an interconnected and rapidly evolving business landscape, companies must concentrate on orchestrating efficient supply chain operations (Pfaff, Birkel & Hartmann 2023; Saikouk et al. 2021; Zeng 2022). This requires a combination of diverse competencies to effectively manage the complex and multilayered processes involved in facilitating seamless flow of goods and services within and between organisations in the supply chain (Midgley & Bak 2022; Saikouk et al. 2021). Given that SCM is widely considered a critical factor for business success, competent SCM professionals play a crucial role in ensuring smooth movement of goods, services, information and financial resources among participants throughout the supply chain. The literature highlights several key competencies necessary for the effective implementation of SCM practices. These competencies can be categorized into cognitive, interpersonal, technical, self-efficacy and strategic domains (Alagarsamy et al. 2021; Asghar et al. 2023; Bentley, Robinson & Zanhour 2022; Kim & Chai 2014; Schulze, Bals & Johnsen 2019; Stek & Schiele 2021). Each category encompasses a wide range of skills and knowledge that are essential in managing various aspects of the supply chain to achieve organisational goals.

Supply chain management professionals with strong technical skills are indispensable for improving supply chain efficiency and operating performance (Alsmairat & AL-Shboul 2023; Orobia et al. 2020). This calls for organizations to focus on fostering these technical competencies among their employees as they directly impact SCM effectiveness. Such competencies include inventory management, project management, logistics, performance management, forecasting and demand planning skills, risk management, customer service, supplier management and financial management (Atnafu & Balda 2018; Ayodeji, Rjoub & Özgüt 2023; Utama et al. 2022). Inventory management plays a crucial role in achieving an optimal balance between inventory availability and costs. It helps to reduce waste and increase cost efficiency, which ultimately contributes to improved profitability within the organisation (Utama et al. 2022). In addition, supply chain professionals often engage in complex projects with diverse teams and resources. As a result, possessing strong project management skills is highly valued as it enables effective planning, team coordination and operational execution (Bhattacharya & Chatterjee 2022; Marandi Alamdari et al. 2023; Wuni & Shen 2023). These competencies are crucial to ensure the successful completion of projects that align with the overall objectives of the company while ensuring customer satisfaction and fostering business growth. Furthermore, logistics management skills play an integral role in smooth operations within the supply chain network. Having knowledge of international logistics and regulations helps to facilitate cost reduction initiatives and ensures on-time product delivery processes – particularly advantageous for multinational companies seeking global efficiency (Ayodeji et al. 2023; Dobroszek 2020; Tatham et al. 2017). Lastly, performance management skills serve as a bridge between SCM goals and broader business goals. By effectively managing performance metrics related to key aspects such as quality control or resource allocation within the supply chain process.

In addition, several important interpersonal skills for SCM professionals are well documented in the literature as critical competencies for SCM professionals. These skills, including communication, leadership, relationship management and negotiation, are essential for successful SCM (Bak, Jordan & Midgley 2019; Durach & Machuca 2018; Tatham et al. 2017; Wagner, Sancho-Esper & Rodriguez-Sanchez 2020). Communication, which is central to efficient operations, is highlighted in various studies. Effective communication allows for a clear understanding of roles and responsibilities throughout the supply chain, preventing confusion that can lead to supply chain inefficiencies (Derwik & Hellström 2017; Fernando & Wulansari 2021; Reis, Minerbo & Miguel 2021; Schulze et al. 2019). It also serves as an opportunity for knowledge-sharing and decision-making between SCM professionals (Beske-Janssen et al. 2023). Leadership is a crucial interpersonal competence that SCM professionals must possess to be effective in their roles. Supply chain leaders are responsible for driving strategic direction, fostering team cohesion and promoting organisational engagement (Ahmad et al. 2023; Bak et al. 2019). According to Kotzab et al. (2018), effective leaders have a comprehensive understanding of the various components involved and can make informed decisions that align with business objectives. Negotiation skills are crucial for SCM professionals. Effective negotiation abilities enable organizations to establish favourable deals with suppliers and internal teams, leading to improved cost efficiency and business performance (Fernando & Wulansari 2021; Reis et al. 2021).

The importance of cognitive competences in SCM is also widely acknowledged in academic literature. These competencies encompass cognitive prowess, extensive knowledge in the subject area, problem-solving capabilities, critical thinking skills and analytical thinking aptitude. By possessing these qualities, managers can effectively handle intricate operations and make well-informed decisions (Midgley & Bak 2022). Critical thinking enables an unbiased analysis of problems and information while analytical thinking aids in identifying patterns and enhancing supply chain processes. Strategic thinking plays a crucial role by aligning supply chain strategies with broader business objectives and identifying opportunities for innovation (Asghar et al. 2023; Tatham et al. 2017). Furthermore, problem-solving skills are vital when dealing with complex challenges as agility and rapid learning ability become increasingly important because of the ever-changing SCM landscape. Efficient communication facilitates coordination and collaboration among team members while possessing system thinking skills enhances the quality of decision-making and operational processes (Stek & Schiele 2021; Wieland et al. 2023; Wilden, Hopkins & Sadler 2022).

Furthermore, having a broad range of strategic competencies is crucial to managing a supply chain effectively. This includes competencies in aligning business strategies with supply chain operations, promoting operational efficiency and financial success and creating competitive advantages (Akyuz & Gursoy 2020). Also, collaborating with key

stakeholders enhances supply chain resilience and sustainability (Lee 2021). Another required skill in this field is integrating technological tools such as Big Data Analytics, the Internet of Things and Artificial Intelligence (Acioli, Scavarda & Reis 2021). Additionally, effective risk management plays a significant role in identifying potential disruptions in the supply chain system while implementing suitable mitigation strategies to minimize their operational consequences (Kim & Chai 2014; Marandi Alamdari et al. 2023). Supply chain management professionals shoulder supply chain responsibilities for reducing environmental impacts and improving social outcomes (Schulze et al. 2019). It is imperative for SCM professionals to have the capability to prioritize sustainability and ethical dimensions while making supply chain decisions. This demands that supply chain professionals should also possess a well-developed understanding of sustainable practices to incorporate these concerns into broader supply chain decisions effectively. Furthermore, continuous improvement and innovation skills play a significant role in process optimisation, waste reduction, overall efficiency enhancement and the development of tailored solutions that meet customer needs while aligning with sustainability objectives (Ambe, Setino & Jonathan 2023; Perrine & Curkovic 2022).

Self-efficacy, which relates to an individual's belief in their capacity to accomplish tasks and achieve objectives (Bandura 1977; Wood & Bandura 1989), is increasingly an important competence in SCM (Ali et al. 2022; Shahzad et al. 2022). Originating from the social cognitive theory (Wood & Bandura 1989), this idea has gained impetus in SCM literature because it is considered significant in allowing SCM professionals to navigate complex responsibilities and challenges entailed within SCM tasks. Indeed, several studies associate self-efficacy with SCM effectiveness. For example, Cao, Elking and Gu (2022) and Alsmairat and AL-Shboul (2023) found a clear-cut correlation between self-efficacy and the ability of SCM professionals to coordinate stakeholders throughout the entire supply chain. Moreover, Ladd (2020) shows how confidence in one's capabilities can positively influence managerial decision-making in high-pressure situations found in SCM environments. As a result, the influence of self-efficacy on technological adaptation has been observed across industries (Guo et al. 2019). Modern SCM requires individuals with high levels of self-efficacy to adapt and implement new technologies effectively. Carter and Rogers (2008) found that managers with high self-efficacy were more likely to implement sustainable practices and strategies in SCM demonstrating the value of self-efficacy in embracing sustainable practices.

Methods

The competencies required for effective SCM are diverse, comprehensive and constantly evolving to meet the complex demands of global business operations. This research was designed to provide an insightful analysis of the SCM skills and competencies required in South African companies to successfully compete in the current evolving business

environment. Methodologically, the study relied on a thorough examination of job advertisements relating specifically to SCM positions in South Africa. The data collection process involved an extensive job search using online job portals, recruitment websites and a direct review of selected company websites. The overriding goal was to get a comprehensive overview of the available vacancies through an all-encompassing search. This strategy made it easier to source job offers from a variety of sources from popular SCM job portals such as Pnet and Indeed, recruitment agencies, for example, Ubuntu Staffing and Workforce Solutions, and company websites. Search terms such as 'supply chain management', 'logistics', 'procurement' and 'operations', as well as specific job titles such as 'supply chain manager', 'logistics coordinator', 'procurement specialist' and 'inventory manager' were used to find SCM job advertisements. After removing the duplicates, of the 40 job advertisements collected, 29 were retained for review. Ensuring that each job posting was unique in the data set allowed for an unbiased analysis of the skills employers are seeking under the SCM job requirements. The distribution of these 29 unique job postings in the supply chain context is shown in Table 1.

Data analysis

Atlas.TI software was used to analyse raw data and explore SCM competencies. This software facilitates the management, extraction, comparison and analysis of qualitative data, including quotations, codes and code groups that offer insights into the research question. In this case, Atlas.TI was utilized to identify and store quotations from SCM job advertisements to reveal required SCM competences in South Africa's SCM job market. Based on these quotations from SCM job advertisements, themes and insights were uncovered regarding the necessary skills and knowledge required for SCM. This involved coding quotations in terms of the competences they represented, thus making it easier to categorize them into respective competence groups. This process was thorough and iterative and involved cyclical coding and double-checking to assure that the interpretation and categorisation were consistent and accurate for all data drawn from each of the 29 SCM job advertisements used in this study. After the coding process, Atlas.TI was used to develop code groups representing similar skills and other candidate attributes. This simplified the examination and quantification of the frequency of occurrence for each competence category. As such by examining how often each competence was quoted, the prevalence of the required SCM competence in the SCM job advertisement was easily determined. Applying the relative-row frequencies presented the distribution of each competence category as a percentage of the total, thus highlighting its relative importance to South African organisations. Finally, the column-relative frequencies were applied to show how each competence category was distributed in relation to the total competences described in SCM job advertisements. This demonstrated the emphasis placed on each competence in relation to the aggregate competences that employers prioritized.

Findings

The analysis of SCM job advertisements in South Africa using Atlas.ti 23 presented powerful insights into the SCM skills and competences that employers are looking for in SCM professionals. A comprehensive list of 20 codes that describe the required SCM skills relevant to SCM in South Africa is presented in Table 1.

These results represent the frequency of different competencies as listed in job advertisements in the SCM sector, with the value indicating how many out of the 29 advertisements featured each competency. From the data, SCM competency is the most sought-after, appearing in every advertisement examined. This implies that a fundamental understanding of SCM is paramount in the SCM job market in South Africa. Other frequently sought competencies include leadership skills and personal effectiveness attributes, both with a prevalence of 27 out of 29. These rankings show that while technical knowledge is critical, so is the ability to lead teams and maintain efficiency under various circumstances. Business acumen and project management are also important, appearing in 26 and 25 advertisements, respectively. This might reflect the need for individuals to have a good grasp of the business's overall picture and manage specific supply chain projects. Interestingly, competencies such as negotiation skills, decision-making, vendor management, forecasting and demand planning, and customer service are occurring less occurrence in SCM job advertisements. They might still be essential for some roles but appear not to be universally required. These results illustrate the varied nature of competences sought in SCM jobs, implying that a combination of technical, strategic, cognitive and interpersonal skills might increase employability in this sector. After grouping the SCM skills into their relevant categories as discussed in the literature, five categories of quintessential competences were evident as demonstrated in Table 2.

Table 2 demonstrates the code-document analysis of the quintessential SCM competences presented in SCM job advertisements in South Africa. It is evident that employers in South Africa put more emphasis on technical competences ($Gr = 345$, $Gs = 17$). They account for 34.74% of all the grounded data and appear in 70.83% of 29 SCM job advertisements analysed in this study. This demonstrates the widespread search for SCM practices in South Africa. Technical competencies are directly related to SCM core functions and include subject knowledge and expertise (Dolgui & Ivanov 2021). This is consistent with the study by Enz and Lambert (2023) who maintain that SCM technical competences are of high value across organisational levels. This further underlines how significant technical competences are to organisations in their bid to manage ever-mounting SCM challenges (Hugos 2018). It is also averred that organisations prioritize technical competences to realize supply chain excellence, and competitiveness and thus meet customer expectations (Kotzab et al. 2018; Reis et al. 2021;

TABLE 1: Requisite supply chain management skills for South African supply chain management professionals.

Quintessential skill	Frequency	%	Grounded
Analytical skills	17	58.8	29
Business acumen	26	89.7	154
Collaboration skills	15	51.7	26
Performance management skills	22	75.9	86
Project management skills	25	86.2	109
Leadership skills	27	93.1	138
Negotiation skills	9	31.0	12
SCM process knowledge	29	100.0	217
Inventory management skills	18	62.1	44
Personal effectiveness attributes	27	93.1	140
Financial management	21	72.4	79
Decision-making skills	5	17.2	5
Information technology skills	11	37.9	17
Vendor management skills	5	17.2	6
Risk management skills	16	55.2	20
Strategic planning skills	22	76.9	81
Communication skills	16	55.2	36
Innovation skills	14	48.3	14
Forecasting skills	7	24.1	12
Customer service skills	11	38.9	22

SCM, supply chain management.

TABLE 2: Distribution of competence categories for supply chain management professionals in South Africa.

Category	Gr	Gr (%)	Gs	Gs (%)
Strategic competences	299	30.05	9	25.00
Technical competences	345	34.74	17	70.83
Cognitive competences	242	24.37	5	20.83
Personal efficacy	211	21.21	8	33.33
Interpersonal competences	71	7.14	4	16.67
Grand total	1168	100.00	43	100.00

Gr, grounded; Gs, grounded share.

Wagner et al. 2020). Overall, companies value these technical competencies because efficiency, cost-saving, and the overall efficacy of the supply chain operations are achieved on the basis of these competencies. This additionally indicates the necessity for training insitutions to accentuate technical competencies in their curriculum.

Strategic competences (Gr = 299, Gs = 9) stood out and accounted for a weighted frequency of 30.05% of quotations drawn from the selected SCM job advertisements in South Africa. They were relevant in 25% of each of the job advertisements implying that strategic competencies are connected or are relevant to a quarter of all the data or nodes in the competency network. The demand for SCM professionals with strategic competencies, as revealed in this study, reflects the evolving nature of the business landscape. This aligns with the notion discussed by Akyuz and Gursay (2020) that supply chains have transformed from a logistical function to an integrated and strategically important component within organisations. Consequently, SCM practitioners need advanced problem-solving skills to address complex operational challenges (Akyuz & Gursay 2020; Beske-Janssen et al. 2023). According to Dolgui and Ivanov (2021), strategic competencies are crucial for SCM professionals to align cross-functional goals with overall

business objectives, resulting in improved efficiency, reduced costs and strengthened competitive advantage. Worldwide, strategic competencies in SCM are valued by companies. Organisations set higher standards for cognitive abilities in leadership and management positions, especially for making critical decisions about SCM operations to achieve strategic objectives. In the South African business ecosystem, where maturity levels may be lower than in developed economies, the importance of strategic competencies for SCM professionals is even more significant. Companies in South Africa seek to hire supply chain professionals who are able to navigate complex supply chain functions, innovate and drive success in such an environment. Thus, this finding not only reflects market trends but also emphasizes that requirements for SCM skills are evolving in line with a complex and strategic SCM landscape. In a dynamic and intricate field such as SCM, where changes are swift and complexity is a constant, the robust demand for strategic competencies underscores the industry's need for professionals who are not only adept at devising adaptive strategies but also navigate complexities to ensure successful SCM operations.

Also in Table 2, the findings demonstrate that cognitive competencies such as decision-making, critical thinking and problem-solving are highly valued in approximately one-quarter of the selected SCM job advertisements in the South African labour market. This observation aligns with existing literature, such as the works of Dong et al. (2019) and Preuss and Fearn (2022), acknowledging the substance of cognitive competencies in SCM functions. Nonetheless, in the South African SCM labour market these competencies seem to be less pronounced compared with the other competency categories. The grounded share (Gs) score of 5 implies that these competencies appear in fewer SCM job advertisements. This suggests that such competencies might be specific requirements or contextually relevant for certain SCM practices in certain South African organisations. This suggests variations in the nature and requirements of different SCM positions or the strategic priorities of individual organisations. Additionally, the level of the advertised job positions could impact the inclusion of cognitive competencies in SCM job advertisements. Typically, organisations have higher standards for cognitive abilities in leadership and management positions, especially for making critical decisions about SCM operations (Ladd 2020; Perrine & Curkovic 2022). Further research to provide a more complete insight into how specific companies prioritize these competencies is necessary. Also, it would help to understand how hiring practices differ among organisations in the South African SCM labour market.

In addition, Table 2 shows that personal efficacy is an essential attribute for supply chain professionals in South Africa, accounting for 21.21% of the total data grounding and appearing in 33.33% of the job advertisements analysed. Personal efficacy significantly affects a person's performance in demanding SCM roles, making it a crucial requirement for SCM professionals worldwide. However, in South Africa,

its frequency in job requirements is lower, suggesting that it may not be universally considered necessary for all SCM roles in South African organisations. This may be influenced by factors such as the specific role, company culture or the demands of the South African SCM industry. It is interesting to observe that the emphasis on personal efficacy may be unique to South Africa's SCM industry because of the region's specific challenges and opportunities for conducting business. A comparison of the data with other industries or geographical locations could yield valuable insights. Therefore, further investigation is needed to verify this hypothesis and its implications for hiring practices, training and development initiatives in the SCM industry. These findings challenge the study of Santa et al. (2022), which posits that technical skills are the primary requirement in SCM job listings. Our methodology was designed to provide a comprehensive evaluation of SCM competencies beyond technical skills. These results align with (Alsmairat & AL-Shboul 2023) research on the growing importance of personal efficacy in modern business practices and shed light on sector-specific expectations in the South African context.

Given the Groundedness score of 71 and Gs of 4% of all the data in the analysis, interpersonal competencies, including effective communication, teamwork and collaboration skills, are important but not emphasized across the considered SCM job advertisements. This is fascinating given that several scholars recognize interpersonal competencies to be central to achieving efficient SCM (Durach & Machuca 2018; Fernando & Wulansari 2021; Wisner et al. 2021). Effective communication is the cornerstone of fruitful SCM relations, with its importance underscored by Fernando and Wulansari (2021). This skill aligns supply chain stakeholders with the company objectives, goals and plans. Communication is said to be important for streamlining mutual expectations, limiting misunderstandings and mitigating risks in the supply chain. Furthermore, teamwork and collaboration are fundamental in SCM to cater for the interconnected nature of supply chain relationships (Batwa & Norrman 2021; Qazi, Appolloni & Shaikh 2022; Sahay 2003). Certainly, a well-coordinated team can be expected to synergize to solve complex problems and hurry processes. Collaboration extends beyond internal operations, involving intricate relationships with suppliers, clients and diverse business partners. Notwithstanding this vital role of interpersonal competencies SCM, the Groundedness score and share suggest that employers in South Africa tend to undervalue them in job advertisements compared with other competencies. This could be an oversight or reflect the often technical focus in SCM roles, where hard skills such as logistics, procurement and inventory management often take centre stage. Hitherto, Wisner et al. (2021) herald the upward trend towards soft skills such as communication, teamwork and collaboration should be in line with a possible future shift in SCM hiring trends towards these competencies. This necessitates further research to confirm the findings and shed light on why employers may not be stressing these valued competencies in job advertisements in the South African SCM industry.

Discussion

The primary aim of this research was to conduct a comprehensive analysis of code documents to examine the competency requirements for supply chain professionals in South Africa. The findings of this analysis reveal several crucial insights into the multifaceted demands of the South African SCM job market. The findings underscore the diversity of SCM competencies sought after by employers within South Africa. This diversity underscores the value placed on multifaceted competencies in this field. Technical competencies emerge as foundational pillars, aligning with the assertions made by Dolgui and Ivanov (2021). These competencies are essential for addressing the intricate challenges of SCM, leading to enhanced operational efficiency and competitiveness, as corroborated by Qazi et al. (2022) and Reis et al. (2021).

Furthermore, the findings emphasize the significance of strategic competencies in South Africa's SCM job market. Employers seek professionals who can plan and execute supply chain operations amid the increasing complexities in the field. These strategic competencies build upon the technical foundation and make a huge contribution to business success. Cognitive competencies, such as critical thinking, problem-solving and the ability to conceptualize complex supply chain networks, also emerged as crucial facets of SCM professionalism. These competencies augment both technical and strategic capabilities, making professionals more adept at navigating the intricate challenges posed by supply chain operations. Besides the technical, strategic and cognitive competencies, the research highlights the importance of self-efficacy, reflecting an individual's belief in their abilities to perform tasks, and interpersonal competencies, including effective communication and leadership skills. These competencies play an indispensable role in maintaining coordination and harmony within supply chains, contributing to their efficiency and effectiveness.

Overall, the findings of this study illuminate the interconnectedness and interdependence of various competency categories within the SCM profession in South Africa. Technical competencies serve as the foundational building blocks, upon which strategic, cognitive, self-efficacy and interpersonal competencies are layered. These competencies, when integrated and well-developed, contribute significantly to the success of SCM efforts in South African organisations. This comprehensive understanding of the distribution and materiality of different competency categories can inform the development of SCM education curricula by higher education institutions and guide individuals aspiring to excel in this field. Moreover, it invites further research into the evolving dynamics of the SCM job market and the evolving role of competencies in meeting its demands.

Conclusion and recommendations

The document analysis of competencies for the SCM roles in South Africa provides valuable insights into the competency requirements of the South African SCM job market, highlighting the complex and interrelated nature of technical, strategic, cognitive and interpersonal skills. These findings have significant implications for higher education institutions in designing curricula that meet industry demands in a comprehensive manner. To begin with, educational providers need to reassess their curriculum structures to incorporate a broader range of competencies. The focus should not only be on technical aspects but should also encompass strategic thinking, cognitive abilities and foundational interpersonal skills. By making these changes, graduates can develop a well-rounded understanding of core SCM functions while acquiring competence in areas such as leadership, communication, strategic planning and problem-solving. In addition, the discovery that there is less focus on interpersonal skills as other competencies challenges previous research that emphasized technical competencies. Such unexpected findings highlight the urgent need for intervention. Higher education institutions should consider incorporating training programmes in soft skills, teamwork exercises and leadership workshops to develop these important interpersonal abilities.

Limitations of the study and further research

Despite considerable attempts to glean insights from various SCM job postings, reliance on public job postings may not encapsulate all desired competencies within organisations. Using internal HR data or conducting interviews with industry experts could provide a more comprehensive view of the SCM skills sought by South African companies. In addition, the analysis may not fully capture the multiple and varied contextual influences on SCM competencies in South Africa. Given the relatively low emphasis on interpersonal competencies in the South African SCM competency framework, it is intriguing and warrants further investigation. Future research could focus on several aspects. Firstly, studies can conduct a country-specific reassessment of interpersonal competencies within the SCM field to gain insights into this anomaly. This may involve examining industry perceptions and experiences with interpersonal skills to obtain a better understanding of their significance. Secondly, exploring unique cultural, socio-economic or sector-specific factors that influence this emphasis would be valuable. Thirdly, future studies could focus on understanding how these competencies apply in industry practice and their impact on organisational success. In addition, the research could delve into analysing how professionals navigate between different competency categories in various SCM contexts. Such investigations would provide valuable insights into the complexity and dynamics of real-world SCM scenarios, contributing to an enhanced knowledge base for both SCM education and practical implementation.

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Competing interests

The author has declared that no competing interest exists.

Author's contributions

A.M. is the sole author of this research article.

Ethical considerations

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Data availability

The data that support the findings of this study are available from the corresponding author, A.M., on reasonable request.

Disclaimer

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