

Competency Characteristics of Management Positions in Foreign Trade Under the Digital Economy: Based on a Survey of Manufacturing Enterprises in the Guangdong-Hong Kong-Macao Greater Bay Area

Fangyan Feng¹

¹ Macau University of Science and Technology, Macau SAR, China

Correspondence: Fangyan Feng, Macau University of Science and Technology, Macau SAR, China.

doi:10.56397/FMS.2025.03.07

Abstract

This research was to explore the digital literacy, leadership competence, and professional quality possessed and expected to be possessed by management personnel in the manufacturing enterprises carrying out foreign trade in the Greater Bay Area (GBA) of Guangdong province, China. A literature review was conducted to review the definition, concepts and related empirical research of digital literacy, leadership competence and professional quality. A set of interview questions were designed based on the literature review, and interviews were conducted involving 10 management personnel of the manufacturing enterprises in the GBA with foreign trade businesses. The findings showed that the interviewees held themselves possessed basically satisfying digital literacy, leadership competence, and professional quality. However, all of them held that they needed to further enhance their competence characteristics in these aspects. Two conceptual models were designed to illustrate interviewees' existing competence characteristics, as well as the gaps between existing and expected capabilities.

Keywords: digital economy, foreign trade management positions in the Greater Bay Area, competency characteristics, interview research

1. Introduction

In the first 11 months of 2024, the total import and export volume of foreign trade in the Greater Bay Area (GBA) of Guangdong province, China reached ¥8.27 trillion yuan, with a year-on-year increase of 10%, and Guangdong became the only province among the top ten foreign trade provinces in China to achieve double-digit growth. The contribution rate of Guangdong's foreign trade in the country reached 40.9%, demonstrating its important position in national foreign trade (Southern Metropolis Daily, 2024). The industry distribution of manufacturing enterprises engaging in foreign trade in the GBA is extensive, mainly concentrated in the fields of mechanical and electrical products, containers, ships, electric vehicles, etc. (Southern Daily Online Edition, 2024).

In recent years, digital technology has made rapid progress and profoundly changed the operational methods of various industries (Calderon-Monge & Ribeiro-Soriano, 2024), and manufacturing enterprises in the GBA are no exception. Digital transformation has put forward higher requirements for the managers of manufacturing enterprises with a foreign trade orientation in the GBA, requiring them to make a qualitative leap in leadership, professional quality, and digital capabilities compared to before, in order to adapt to the professional demands of the times and economic development. Therefore, it is particularly important to study the competence characteristics of Chinese manufacturing enterprise management positions/personnel against foreign trade and digital backgrounds.

2. Research Aim and Objectives

Aim: To explore the competency characteristics of manufacturing enterprise management positions of the GBA in China against digital and foreign trade backgrounds, in order to construct a corresponding competency characteristic model.

Objectives:

- 1) To explore digital literacy and green economy/sustainability competences for manufacturing enterprise management positions in the GBA under digital and foreign trade backgrounds;
- 2) To explore leadership competences for manufacturing enterprise management positions in the GBA under digital and foreign trade backgrounds;
- 3) To explore professional competences for manufacturing enterprise management positions in the GBA under digital and foreign trade backgrounds;
- 4) To explore the gap between the existing competences and expected competences of manufacturing enterprise managers conducting foreign trade in the GBA;
- 5) To construct a model for the competency characteristics of foreign trade management personnel in the manufacturing firms in the GBA.

3. Literature Review

The competency characteristics of foreign trade enterprise management positions can be derived from existing literature.

3.1 Digital Capabilities

In terms of digital capabilities, digital skills can assist managers in data analysis, budget control, and more. In the digital age, foreign trade managers need to have certain technical application abilities, including proficient use of office software, network tools, and trade platforms. They need to be able to use technological means to improve work efficiency and information processing capabilities (Oberlander et al., 2020). In addition, data analysis skills are particularly important in foreign trade management. Foreign trade managers need to be able to grasp market dynamics and develop effective market strategies and sales plans through data analysis. Mastering data analysis tools and techniques, such as Excel, SPSS, etc., can help them better understand market data and make accurate decisions (Rahman & Muktedir, 2021). Thirdly, foreign trade managers need to be familiar with the use of e-commerce platforms, including product listing, order processing, and customer management, etc. Mastering these platform operations proficiently can help foreign trade managers better carry out online business and expand their market (Dai et al., 2024). Finally, foreign trade managers need to have the awareness of network security, understand how to protect the data and transaction security of the enterprise, and prevent information leakage and fraudulent behavior. Understanding basic network security measures and prevention techniques is necessary (Gagliani, 2020).

The study by Qin et al. (2025) was from the perspective of emerging market economies, to explore the bi-lateral exchange with China based on digital development and trade relations within BRICS countries' framework. The findings showed that digital development significantly enhanced bi-lateral trade volumes, while institutional differences not only did not hinder bi-lateral trade with China, but also played the role of adjustment (Qin et al., 2025). This suggests that the managers of foreign trade firms in the GBA of China must lay emphasis on their digital management capabilities to promote the further development of bi-lateral trade with other emerging economies. Ahmedov (2020) pointed out that digital space had been becoming a key area of global trade, leading to the changes of patterns and structures in international trade. Global competition had been accelerated and transitioned to virtual/intangible departments. Through the expansion of digitization, intangible employment and cross-national businesses, international trade field ushered in new opportunities and models (Ahmedov, 2020). The foreign trade managers of the GBA of China have to strengthen their own digital capabilities to adapt to the demand of new and changed situations.

3.2 Leadership

In terms of leadership, managers of foreign trade enterprises need to possess foresight and charisma. They need to have the ability to foresee the future, gain insight into industry trends, and set clear goals for the organization. At the same time, they need to have the ability to attract and influence the team through personal charm and vision, stimulate the team's potential, and jointly pursue excellence (Sacavem et al., 2017). Moreover, they also need to possess decisiveness and control. In the face of challenges, managers need to make decisive decisions, control the situation, and ensure the achievement of goals. Meanwhile, they need to be capable of effectively controlling organizational development to ensure smooth implementation of strategies (Siyal, 2023).

According to Bird and Mendenhall (2016), global leadership of enterprises is featured by cross-cultural

management capabilities. International leadership includes international management, international human resources, and international strategies, while cross-cultural management refers to adapting to the differences of cultural practices in management abroad (Bird & Mendenhall, 2016). However, foreign direct investment (FDI) made by multinationals is not the same as the foreign trade situations of Chinese domestic enterprises. The latter may be regarded as the primary stage of the former. This indicates that the managers of foreign trade firms of China need to learn from the advanced and rich experiences of international managers in Western multinationals to enhance their leadership competences. It was found by Tsai (2022) that the adjustment of leadership behaviors had a mutual relationship with leadership efficacy. In the context of digital economy, the managers of foreign trade firms in China need to adjust their leadership behavior to adapt to new situations and new problems. It was pointed out by Siyal (2023) that irrespective of whether it is small-and-medium-sized firms or multinational corporations, engaged, well-trained and qualified managers and leaders who can effectively and efficiently lead market, resources and teams are needed by both (Siyal, 2023). Therefore, it is very important that the managers in foreign trade firms in the GBA of China grasp necessary leadership capabilities/competences to meet the requirement of continuously changing and evolving foreign trade conditions internally and externally.

3.3 Other Professional Competences

In terms of professional qualities and competences, foreign trade managers need to be familiar with the production process, product types, quality standards, etc. of the industry, master the basic rules, processes, documents, etc. of foreign trade, and be able to formulate reasonable strategic plans and goals (Virtanen et al., 2023). In addition, in the Chinese market, especially in the field of foreign trade, the environment is rapidly changing and complex. Managers need to have a high degree of flexibility and agile learning ability, be able to quickly adapt to market changes, absorb new knowledge, optimize market strategies, and maintain advantages in constantly changing situations (Desalegn et al., 2024).

It was argued by Szkudlarek et al. (2020) that communication is crucial to most international business operations, and enterprises are led, managed, built and dissolved through communication. Communication plays its important role in maintaining and establishing partnerships, transactional negotiation, maintenance and development of relationships, and knowledge exchange. Successful communication is more and more regarded as the critical factor in operations at organizational, team and interpersonal levels (Szkudlarek, 2020). To foreign trade managers in the firms of the GBA, one of the embodiment and reflections of their professional competences is communication skills. In the viewpoint of Kedia and Mukherji (1999), international business managers need to have global vision and global ways of thinking supported by proper knowledge and skills. Managers may have a number of mindsets, from defenders facing the home country internally, to continuous explorers, to controllers, and to integrators facing the world (Kedia & Mukherji, 1999). The foreign trade managers of enterprises in the GBA are basically at the stage of continuous explorers and controllers, which is determined by the fact that China has not yet completed industrial upgrading and crossed the middle-income trap (Zhao et al., 2019), and its foreign trade enterprises have not extensively formed their own internationally renowned brands (Polfub, 2021). The study by Tangkittipaporn & Songkroh (2008) targeting Chinese foreign trade enterprises showed that the most crucial capabilities of managers included accounting management, marketing, export businesses and human resource management (HRM) (Tangkittipaporn & Songkroh, 2008). Moreover, in today's business environment, green economy and sustainable development should be emphasized (Salifu & Salifu, 2024).

3.4 Conceptual Framework

According to the literature review, the conceptual framework of the research is designed as follows:

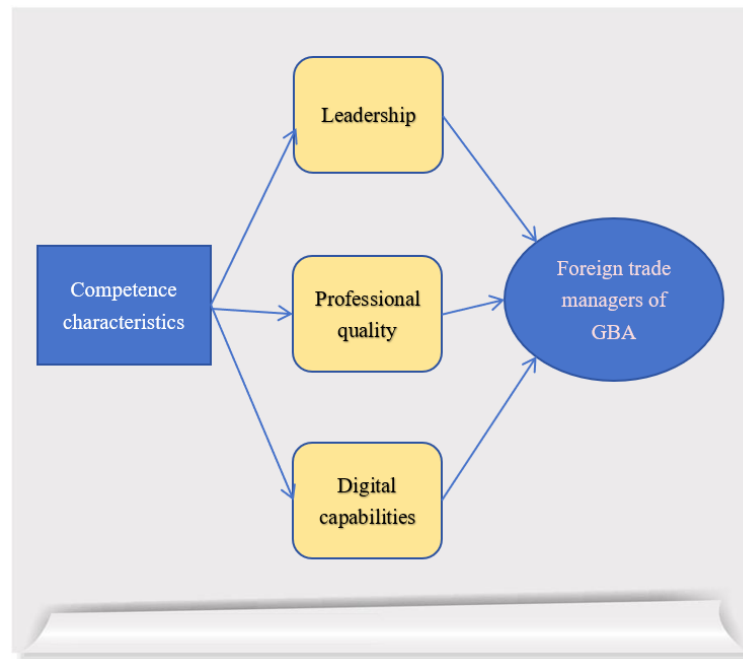


Figure 1. Conceptual framework

4. Methodology

4.1 Research Design

This research adopts interpretivism research philosophy (Pervin & Mokhtar, 2022) and inductive reasoning approach (Heit, 2000). One of the benefits of interpretivism lies in that it can incorporate the subjective meanings endowed by research subjects (Saunders et al., 2015) to the phenomenon and issues of foreign trade management competencies. The advantage to use inductive reasoning lies in that it meets the requirement of exploratory research studies (Jebb et al., 2017).

The researcher applied qualitative research method, based on primary data collection. Interpretivism-induction and qualitative research can form a continuum (Goldkuhl, 2012), and qualitative method can help collect rich data to enhance the in-depth nature of exploratory research (Palinkas et al., 2015). Moreover, primary data provides rich raw information, allowing the researcher to gain a deeper understanding of the research topic (Prada-Ramallal et al., 2018). Primary data reflects the current information and is the latest and most timely. It can directly target the research objectives, making it more reliable to answer specific research questions (Taherdoost, 2021).

4.2 Interview Questions

All interview questions were open-ended to meet the requirements of qualitative method, and interviews were semi-structured. Interview questions were designed according to the literature review, which are shown as follows:

- 1) Please say something about your use of digital technologies to carry out daily operational management (Source: Oberlander et al., 2020; Rahman & Mukhtadir, 2021)
- 2) How about your competences to carry out e-commerce? (Source: Dai et al., 2024)
- 3) Please say something about your competences for cybersecurity. (Source: Gagliani, 2020)
- 4) What is your leadership ability to foresee the future, gain insight into industry trends, and set clear goals for the organization? (Source: Sacavem et al., 2017)
- 5) What is your leadership ability to make decisive decisions, control the situation, and ensure the achievement of goals? (Source: Siyal, 2023)
- 6) What is your leadership competence to effectively and efficiently lead market, resources and teams? (Source: Siyal, 2023)
- 7) What is your professional quality to ensure that you have a high degree of flexibility and agile learning ability, and are able to quickly adapt to market changes? (Source: Desalegn et al., 2024)

8) How about your communication skills in foreign trade? (Source: Szkudlarek, 2020)

9) Please say something about your professional quality that can support you to achieve the goal of green economy and sustainable development in foreign trade if needed. (Source: Salifu & Salifu, 2024)

10) Do you think there is a gap between your current competencies and your expected competencies in leadership, professional qualities, and digital abilities? Can you talk about this aspect?

4.3 Sampling

The sampling method used was convenience sampling, with those managers who wanted to participate in the interviews being included as the sample. Although convenience sampling belongs to a kind of non-probability sampling method (Stratton, 2021), qualitative research does not require generalizability as quantitative studies, but rather emphasize case specificity. Therefore, it was considered convenience sampling would not affect the insights of qualitative research findings.

4.4 Participants

10 manufacturing foreign trade management personnel in the GBA were invited to participate in the interviews.

Table 1. Participants

No.	Gender	Age	Position	Industry	Years of service in foreign trade sector
1	Male	50	General manager	Electronic product	16
2	Male	46	Marketing manager	Mechanical equipment	10
3	Female	52	Office General Secretary	Textiles and clothing	16
4	Male	38	Workshop director	Toy	4
5	Male	40	Foreign trade administrator	New energy vehicles	4
6	Male	35	Department manager	Electromechanical	11
7	Female	43	Sales manager	Lithium battery	9
8	Male	49	Foreign trade manager	Solar cell	13
9	Female	44	Foreign trade administrator	Cool Home Appliances	8
10	Male	52	Foreign trade supervisor	LCDTV	16

4.5 Pilot Study

The researcher carried out a pilot study involving two friends who engage in foreign trade. The main purpose of pilot study is to identify and correct potential issues in interview questions to ensure the effectiveness and reliability of final ones (Majid et al., 2017). Based on pilot study results, the researcher modified items that might be misunderstood due to unclear wording or improper option settings. The two participants provided feedback, pointed out issues they did not understand or parts they considered inappropriate. The feedback was used to improve the design of interview questions, making them more comprehensive and user-friendly (Tate et al., 2023).

4.6 Data Collection

The data was collected in the form of face-to-face interviews, in the private teahouses in several major cities of the GBA, including Hong Kong, Macao, Guangzhou, Shenzhen, Dongguan, and Foshan. The interview contents were recorded in the form of mobile phone recording, and were sorted out by the researcher to get transcripts.

4.7 Data Analysis

The data was analyzed based on thematic analysis (Erlingsson & Brysiewicz, 2017). The process is divided into the following steps:

1) Firstly, the researcher got familiar with the data to gain a deep understanding of the data content to ensure a comprehensive understanding of the overall characteristics and key information of the data. This step laid the foundation for subsequent analysis (Castleberry & Nolen, 2018).

2) The researcher systematically browsed the data and performed initial encoding, tagged key information such as key words, phrases, or sentences, and assigned them codes. During the coding process, strive for comprehensiveness, add new code at any time, classify data according to the code, and grasp the key points and

common meanings (Braun & Clarke, 2022).

3) The researcher integrated coding and searched for potential thematic foundations by repeatedly examining the code, identifying underlying patterns, and integrating relevant code into themes. This process is similar to data compression, simplifying complex data into several core themes. The researcher explored the theme in this way (Jowsey et al., 2021).

4) The researcher reviewed the topic. Return to the dataset, compare the topic with the original data, consider whether there are any omissions, whether the topic really exists, and whether it can be optimized. Discovered issues were split, merged, discarded, or new themes were created (Castleberry & Nolen, 2018).

5) Define and name the theme. After determining the topic list, accurately define the connotation and extension of the topic, and clarify its significance and scope in the research. (Jowsey et al., 2021).

6) Tell data stories, provide thematic evidence, and embed typical excerpts to demonstrate the rationality of the analysis (Braun & Clarke, 2022).

4.8 Ethical Issues

The researcher ensured confidentiality and anonymity (Wiles et al., 2008) of interviews, and an informed consent was sent to each interviewee for their check and acceptance (Akhurst & Leach, 2023). Interview questions did not involve interviewees' privacy, and would not cause them discomfort. They were respected, and the raw data transcripts are protected with encryption and password in the personal computer of the researcher (Ducato, 2020).

5. Findings

5.1 Theme: Interviewees Use Various Digital Tools to Engage in Foreign Trade or Assist Their Operations Management

Interviewees use various digital tools for foreign trade and/or operations management, from basic office software to more complex digital management systems. For example, according to Interviewee I:

'I have the most basic ability to operate office software, such as Word, Excel, PPT, PDF, etc.'

According to Interviewee C:

'As the cornerstone of secretarial work, word processing requires secretaries to be proficient in word processing software such as Microsoft Word and WPS, in order to efficiently complete tasks such as document editing, formatting, style application, and review.'

Various digital management systems are applied by the interviewees, including 'online marketing system based on customer behavior' (Interviewee B), Enterprise Resource Planning (ERP) systems (Interviewee D; Interviewee E; Interviewee G), Supply Chain Management (SCM) system (Interviewee D; Interviewee G), Customer Relationship Management Systems (CRM) (Interviewee F), Logistics Management Systems (LMS) (Interviewee G); Foreign Trade Management Software (FTMS) (Interviewee H). For example, according to Interviewee H:

'Mastering the use of foreign trade management software can help me efficiently handle orders, customs clearance, logistics, and other affairs, improving work efficiency and accuracy. Through foreign trade management software, I can automate some repetitive tasks, saving time and energy.'

According to Interviewee G:

'My team and I use a CRM system to manage customer information, track sales opportunities, and improve customer satisfaction.'

To sum up, through using digital technologies to assist operations management and foreign trade, the interviewees enhance their work efficiency and team performance.

5.2 Theme: Interviewees Hold They Are Skillful in E-Commerce Platform Operations, Digital Marketing, and Other E-Business Functions

The interviewees emphasize e-commerce, and are skillful and proficient in e-business operations and digital marketing, according to their self-evaluation. The major e-business platforms mentioned by them include Alibaba and Amazon (Interviewee B; Interviewee G). For example, according to Interviewee B:

'In terms of e-commerce, I am proficient in the operational rules and skills of e-commerce platforms such as Amazon, Alibaba, etc.'

Most of the interviewees are confident in their abilities of e-commerce, and consider e-business plays a crucial role in their companies' foreign trade. According to Interviewee E:

'For foreign trade specialists, e-commerce is an inevitable aspect to be involved. In addition to conducting

international marketing and trade through our official website, our company also expands sales channels through e-commerce platforms.'

There are the anomalies that two interviewees do not directly engage in e-commerce for foreign trade. Interviewee C as an Office General Secretary is responsible for online meetings and remote collaboration, while Interviewee D as a Workshop Director *'use(s) data analysis tools to conduct in-depth analysis of production data, identify potential problems, and optimize production processes'*.

To sum up, from the data analysis results, it can be seen that the companies of the interviewees emphasize e-commerce, and all the interviewees have their own skills in e-commerce or other e-business functions.

5.3 Theme: Companies Take Various Cybersecurity Measures, and Interviewees Are Mainly Responsible for Team Member Education and Assisting Specific Cybersecurity Technicians

The companies where the interviewees work take respective measures to protect cybersecurity. For example, according to Interviewee B:

'Our company installs professional firewalls and security software to ensure the security of our website... we regularly backup website data in order to recover data in a timely manner in case of network attacks or failures, reducing economic and reputational losses.'

As for the interviewees, because their job positions are not cybersecurity technicians, they are mainly responsible for improving the cybersecurity awareness of team members and related general-knowledge training. Moreover, they also assist professional cybersecurity technicians in regular checking and monitoring. For example, Interviewee F said:

'I am mainly responsible for security awareness training, improving employees' awareness and prevention of network threats.'

Interviewee D said:

'I am responsible for cooperating with the security audit to ensure the continuous maintenance and improvement of the system's security.'

There is only one interviewee — Interviewee C who works as Office General Secretary, acting as the main person accountable for conducting security reviews.

To sum up, all respondents have the awareness of network security, understand and support the company's network security measures. However, they are not professional network maintainers themselves, and network security mainly plays the auxiliary and supporting role in their conducting foreign trade e-commerce.

5.4 Theme: Strong Awareness of Green Economy and Sustainability, Recognition of Personal, Company and Industrial Limitations, and High Expectation for Green Future Both Personally and Organizationally

All the interviewees have their awareness of the importance of green economy and sustainability. For example, according to Interviewee F:

'With the continuous deepening of the green development concept globally, it is imperative for enterprises in the electromechanical industry to practice sustainable development.'

In the viewpoint of Interviewee D:

'Traditional toy manufacturing materials contain a large amount of plastic and harmful substances, posing potential threats to the environment and children's health.'

However, the interviewees recognize the limitations of themselves, the company and the industry in green economy and sustainability. For example, from a personal perspective, Interviewee A said:

'I feel that I am still far from doing enough in this regard.'

Interviewee G said:

'However, industrial products cannot avoid generating negative environmental externalities.'

Despite the recognition of limitations, some interviewees admit the current policies executed by their companies to make efforts in facilitating sustainability. According to Interviewee D:

'In order to meet the green demands of the international market, we are constantly improving our production processes.'

There are two interviewees paying attention to the risks posed to China in terms of international sustainability regulations. According to Interviewee F:

'Currently, overseas green regulations and policies pose risks and challenges to China's exports of mechanical and electrical products as well as our industrial and supply chains.'

Interviewee J said:

'Some green thresholds internationally not only restrict the export of China's household appliances, but also intertwine with issues such as RMB exchange rate, market access, intellectual property rights, carbon tariffs, etc., weakening the international competitiveness of China's household appliance industry.'

In view of such circumstances, the interviewees express their high expectations of future company commitment and their own efforts in sustainability. For example, Interviewee H said:

'I think what we need to do now is to learn more about the relevant policies and regulations in Europe, America, and other market countries, design and manufacture products according to international standards, ensure product quality, and contribute to the development of green and low-carbon economy.'

According to Interviewee B:

'I will learn more relevant knowledge and peer experience in the future, in order to make the necessary contribution to the green economy and sustainable development when needed.'

5.5 Theme: Emphasis on Leadership Competencies in Terms of Market and Competitor Analysis, Goal Setting and Management

Among the interviewees, there is emphasis on and engagement in international market and competitor analysis, and importance is attached to goal setting and management. According to Interviewee C:

'In terms of insight, I require myself to understand the customer's needs in the first place. Customers' purchasing agents and project managers are usually very busy. If I can understand and grasp their meaning in the first place instead of repeatedly asking, customers will think that I am very clever and professional.'

Interviewee E said:

'I also need to analyze competitors' channel information, product information, and pricing to enhance the competitiveness of the product in the target market.'

In terms of goal setting, some interviewees talked about their strategies for/ approaches to goal management. According to Interviewee F:

'If I find that the goal is difficult to achieve or there are problems with the division of responsibilities, I will make timely adjustments and improvements to ensure that the team can achieve the goal smoothly. Only by achieving small stage goals can we be fully prepared to achieve long-term goals.'

In terms of goal setting, some interviewees show high confidence in their own capabilities. According to Interviewee H:

'I usually actively learn about industry trends and developments through various channels every day, in order to assist company executives in setting practical and feasible sales goals.'

The interviewees also tend to have high confidence in their own market vision and insights. For example, Interviewee J said:

'I believe I have a certain level of insight in analyzing and forecasting future industry trends. I actively understand market demand, competitive situation, and industry trends in order to develop product strategies that better meet market demands. Through market research, user feedback, and data analysis, I can identify opportunities and challenges in the market and adjust sales positioning direction accordingly.'

The confidence and positive evaluations of the interviewees on their leadership competencies to foresee the future, gain insight into industry trends, and set clear goals for the organization may come from their years of work experiences in foreign trade.

5.6 Theme: Interviewees Use Different Decision Making, Risk/Crisis Control and Goal Achievement Strategies

The strategies used by the interviewees to make more effective decisions vary. Interviewee B said:

'I use data to study industry and customer trends in a timely manner, analyze competitors' product characteristics, pricing strategies, and market share information, and develop effective plans or scientific decisions.'

Interviewee I said:

'In each decision-making process, record, review, and summarize lessons learned in order to make wiser decisions in similar situations.'

With regard to control, according to different work characteristics, the aspects to control tend to be different for different interviewees. For example, Interviewee H said:

'I assist the company's general manager in assessing market risks and competitive trends, developing

corresponding response strategies, and ensuring the smooth progress of the company's overseas projects.'

Interviewee J said:

'Professional managers need to possess abilities in crisis identification and judgment, response and handling, communication and coordination, as well as learning and summarization. I feel that I need to further strengthen my ability to control crisis situations.'

Interviewee I take advantage of regular reflection to enhance control ability over team members:

'I regularly reflect and summarize my work to ensure that team's systems and processes keep up with the times. Long term management work may make people feel exhausted, so regular reflection and adjustment of management strategies are necessary.'

The decision making, situation control and goal achievement/implementation strategies used by the interviewees lay the foundation for the effectiveness of their leadership practices in foreign trade.

5.7 Theme: Communication and Humanized Management for Team Management; Allocation and Utilization of Various Resources to Lead in Foreign Trade Market

Among the interviewees, there is the utilization of communication strategies for team management. For example, according to Interviewee C:

'Effective communication is required with personnel at different levels, including leaders, colleagues, and personnel from other departments. Good communication skills help coordinate work and convey information.'

According to Interviewee H:

'Maintain one-on-one communication, understand the difficulties and needs of team members, and provide timely help and support.'

Interviewee J utilizes humanized management strategies for better team cohesion and motivation:

'I focus on team building activities such as outdoor activities, meals, and travel to enhance understanding and trust among team members. I also pay attention to the work status and mental health of team members, and help them solve difficulties and problems in a timely manner.'

With regard to leading the market, the interviewees take advantage of the utilization of various resources to support foreign trade sales and marketing. Interviewee I said:

'I use customs data platforms such as Tendata to analyze the import and export data of the target market and find potential customers. The specific operation is to input the product name or HS code, obtain import and export data of the target market, analyze market demand and competition, and develop a market promotion plan.'

In terms of resource allocation, Interviewee A talked about his personal experiences:

'The Alibaba general account occasionally receives inquiries and is usually assigned to the salesperson with the highest inquiry volume for the month. At the same time, publicize the overall account inquiry allocation in the team and reward sub accounts with more inquiries, indicating that the salesperson has done the best in product updates, inquiry response rates, and Alibaba backend optimization, and is worthy of rewards.'

The above strategies applied by the interviewees for team management and resource allocation/utilization enable them to better engage in foreign trade in international marketplaces.

5.8 Theme: Try to Be Flexible and Agile Through on-the-Job Practices, Learning, Reading and Training

The interviewees understand the necessity of flexibility and adaptability/agility to foreign trade work. For example, Interviewee A said:

'In general, I think foreign trade managers should also possess self-management skills, flexibility, and adaptability to cope with the constantly changing market environment.'

Interviewee B said:

'The international market is full of changes and challenges. As a foreign trade personnel, I need to have the ability to flexibly respond to changes and adjust strategies in a timely manner according to market changes and customer needs.'

In order to improve their own flexibility, agility and adaptability, the interviewees take various measures. The concrete strategies include lifelong learning, training, and reading. For example, Interviewee said:

'So, I value lifelong learning and constantly updating knowledge, and believe this is the key to maintaining

success in my future career.'

According to Interviewee D:

'The learning tasks and goals I have set for myself include studying relevant management courses, attending industry seminars and training courses, conducting case studies, learning quality management system standards, learning safety production laws, regulations, and standards, as well as learning team management theories and methods.'

However, due to their relatively busy work schedules, the interviewees learn to be flexible and agile mainly through on-the-job experience accumulation. For example, Interviewee D said:

'My spare time is very limited. So, most of my learning is actually accumulated through workplace experience.'

This can be seen from the answers given by other interviewees about on-the-job coping strategies to be flexible and agile. For example, according to Interviewee F:

'I also need to flexibly adjust marketing positioning and sales strategies according to market demand.'

5.9 Theme: Awareness of the Importance of Communication Skills; Internal and External Communication; Emphasis on Foreign Language Skills and Cross-Cultural Communication

The interviewees are aware of the importance of communication skills in foreign trade work. For instance, according to Interviewee B:

'I believe that customer managers need to establish a good professional image in front of clients, demonstrating integrity, efficiency, self-confidence, personal charm, and high-level professional abilities to win their trust and respect.'

The interviewees engage in both internal and external communications to carry out their work. In terms of internal communications, Interviewee D said:

'As the workshop director, I need to communicate effectively with employees, superiors, and other departments. I must listen to employees' opinions and suggestions, understand their needs and problems, promptly solve their troubles, and establish good employee relationships.'

In terms of external communication, in the opinion of Interviewee E:

'In fact, doing foreign trade is dealing with foreigners, which is to let them trust you. Once they trust you, the order will naturally come to you. Honesty, punctuality, and understanding are qualities that can earn the trust of customers.'

Interviewee H emphasizes communication with peers, while there is emphasis on foreign/English language skills by Interviewee J, Interviewee H, and Interviewee F. As far as cross-cultural communication is concerned, some interviewees talked about their perceptions. According to Interviewee J:

'... it is necessary to understand the cultural backgrounds and business etiquette of different countries to avoid misunderstandings caused by cultural differences.'

Some interviewees have their plan for further improvement in communication skills, including Interviewee H, Interviewee I, and Interviewee F.

Comprehensively, the interviewees have a relatively high awareness of the importance of various communication skills for their foreign trade work, and expect to make progress continuously in the future.

5.10 Theme: There Are Gaps for Improvement, and the Areas Needing Improvement Vary

Through coding and thematic analysis, it is found that all the 10 interviewees recognize that there are gaps between expectations and reality in terms of their leadership, professional, digital literacy and green economy/sustainability competences, despite of different expressions and narrations. For example, according to Interviewee D:

'I feel that I sometimes struggle to improve myself because of my busy work schedule and lack of time for self-learning and training.'

Interviewee F said:

'I feel that there are many aspects of management that need to be learned, and there will be some progress every year. New learning should never stop, and progress slows down with age.'

Interviewee J expressed:

'I strive to become a better foreign trade manager, but I don't have any illusions that I will become the best foreign trade manager.'

As for the areas that need to be improved in the viewpoints of interviewees, they can be summarized in the table below:

Table 2. Areas for improvement

Areas for improvement	Interviewees
Team management	Interviewee A, C, D, I
Market analysis	Interviewee A
Forecasting and planning	Interviewee A, J
Business skills	Interviewee B
Overall management level, skill & practices	Interviewee B, C, E, H
Leadership	Interviewee C, E, F, G, J
Cost management	Interviewee D
Languages	Interviewee E
Technical ability, cutting edge technologies, expertise	Interviewee E, F, G
Communication skills	Interviewee F, H, I
Digital capabilities, computer skills	Interviewee F, H
Data analysis & statistics	Interviewee G, I, J
Customer relationships	Interviewee H
Employee motivation	Interviewee I
Maintenance and repair knowledge	Interviewee I
Combination of people and task orientations	Interviewee J

Among the interviewees, the most emphasized skill gaps needing improvement are Leadership, Team Management, Overall Management Level, Skill & Practices. For example, according to Interviewee E:

‘... my future career development plan and promotion channels require me to further improve my management skills and leadership abilities.’

There are also other gaps being paid special attention to by specific interviewees. For example, according to Interviewee D:

‘The areas where I need to improve the most at present are cost management and team building abilities.’

To sum up, the interviewees have demonstrated their awareness of the gaps in their various management abilities and competencies, and have relatively considerate plans to continuously improve and engage in lifelong learning in their future career paths.

6. Discussion and Model Construction

6.1 Discussion

According to the literature review, foreign trade managers need to have competencies in digital technologies (Oberlander et al., 2020; Rahman & Muktadir, 2021), e-commerce/e-business platform operations (Dai et al., 2024), and cybersecurity (Gagliani, 2020). The empirical research findings of interviews show that the interviewees have a relatively high awareness of the importance of these aspects, and have grasped a certain level of corresponding skills and capabilities. However, they recognize that they need to further enhance their own competencies in technical ability, cutting-edge technologies, expertise digital capabilities and computer skills, as well as data analysis and statistics, reflecting the gap between personal expectations and reality.

In terms of green economy and sustainability, the interviewees understand the requirements of these aspects currently, which echoes the literature review (Salifu & Salifu, 2024). However, they refer to the limitations of their work contents, their companies and industries in more effectively facilitating green economy and sustainability. Despite limitations, they express their willingness to make more personal contributions to sustainability, and some of them have personal work plans to reinforce sustainability in their future work, which is a gratifying phenomenon.

With regard to leadership capabilities, interview questions designed in this research seem somewhat complex

because of many variables involved, including foresee the future, gain insight into industry trends, and set clear goals for the organization (Sacavem et al., 2017); make decisive decisions, control the situation, and ensure the achievement of goals (Siyal, 2023); effectively and efficiently lead market, resources and teams (Siyal, 2023). The complexity is because of the rich contents of leadership concept per se. The interviewees answered the complex questions in a relatively orderly way, and mostly made positive and confident evaluations on their competencies in these aspects. However, this does not mean that they are satisfied with their current capabilities. Rather, they admit that they still need to strengthen their abilities in team management, market analysis, forecasting and planning, business skills, overall management level, skill & practices, leadership as a whole, cost management, customer relationships, employee motivation, and combination of people and task orientations. The findings demonstrate that the interviewees have relatively high requirements for the improvement of their own capabilities in leadership.

Finally, as far as professional quality is concerned, the interview questions are designed according to the literature review, including a high degree of flexibility and agile learning ability to quickly adapt to market changes (Desalegn et al., 2024), and communication skills in foreign trade (Szkudlarek, 2020). In these aspects, the interviewees talked about their expectations and plans for further enhancing their life-long learning through reading and training. In addition, they showed their actions and behaviors in work to accumulate on-the-job experiences to make their flexibility/adaptability/agility improved further. As far as communication is concerned, interviewees mentioned language abilities and cross-cultural communications, reflecting their relatively high awareness of these aspects.

In view of the consistence of research findings with the literature review, a competence characteristic model is designed to show the capabilities that need to be possessed by the foreign trade managers in the GBA of China:

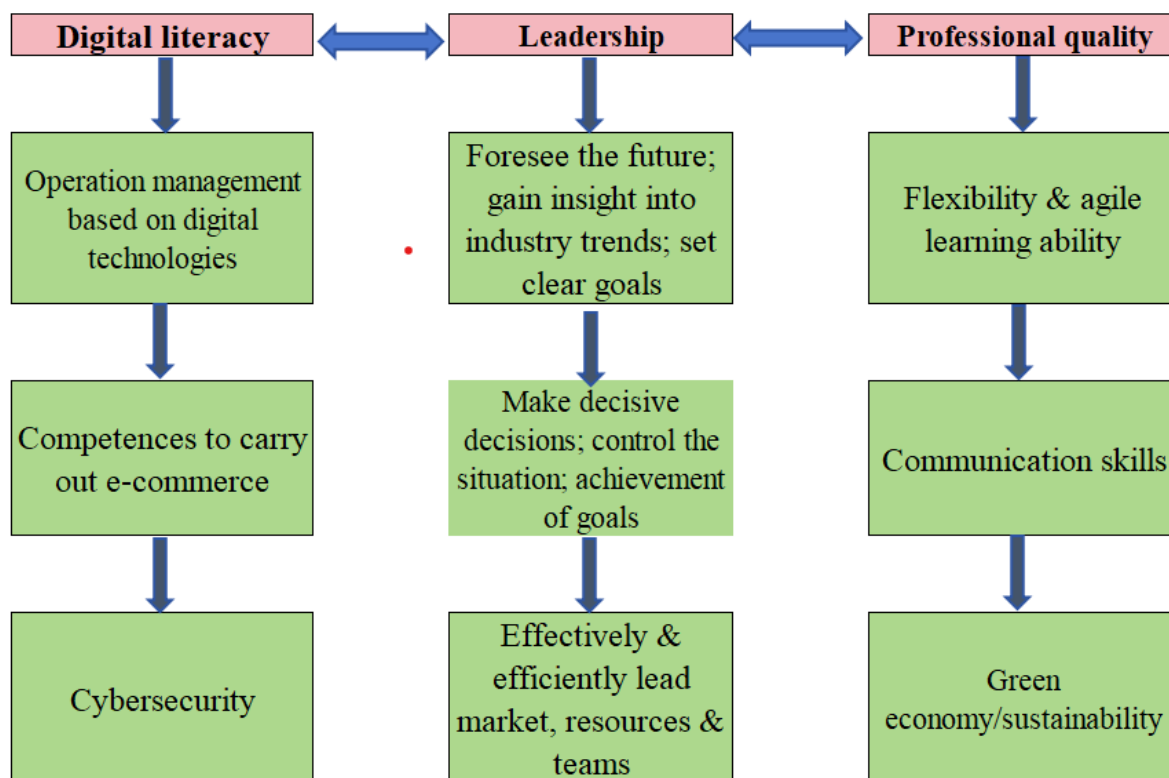


Figure 2. Competence characteristic model for foreign trade managers in the GBA

Source: Author.

According to the gap between expected and existing competences in the viewpoint of the interviewees, a gap model is constructed to illustrate the aspects needing further enhancement/improvement:

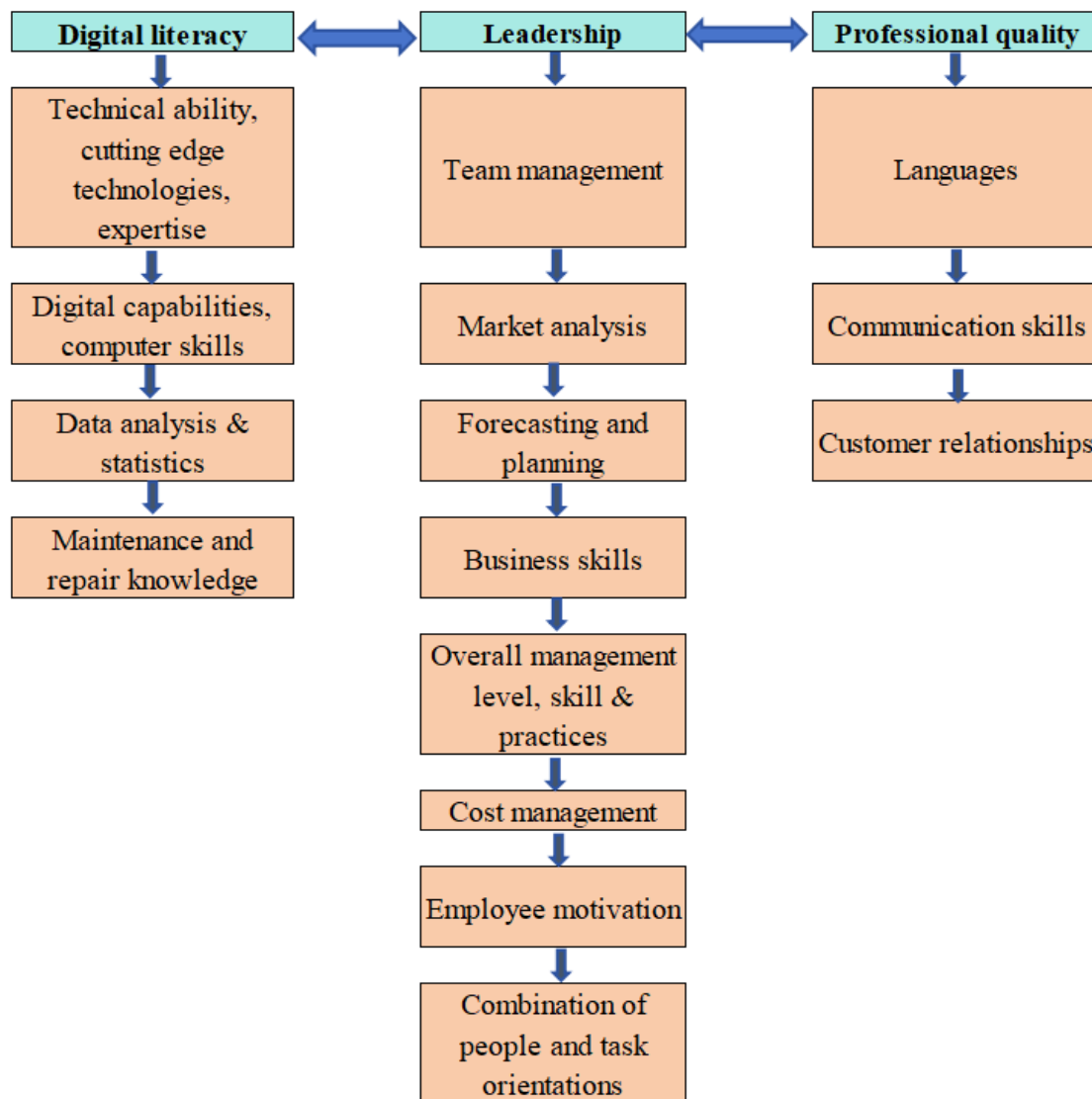


Figure 3. The gap model of competence characteristics for foreign trade managers in the GBA

Source: Author.

7. Conclusion, Limitation and Future Research Direction

7.1 Conclusion

In conclusion, through the literature review and empirical qualitative data collection and analysis of this research, it has been found that the interviewees possess some competence characteristics in digital literacy, leadership, and professional quality. However, all of them consider that there are gaps between their actual capabilities and their own personal expectations of the capabilities which should be further obtained by them. Therefore, they have their plans for future improvement in various aspects to better support their foreign trade work.

7.2 Limitations

The first limitation of the research lies in that the variables are not tested statistically, and there are no hypotheses to be confirmed or rejected whereby. Second, qualitative research method cannot achieve the effect of generalizability to the whole population.

7.3 Recommendations

In future research, statistical model can be constructed involving digital literacy, leadership and professional quality as independent variables, and work performance as dependent variable, to test the effect of the independent variables on the work performance of the foreign trade management personnel in the GBA of China. This needs to be based on relatively large-scale questionnaire surveys to quantify the data collected, with random sampling being applied. In this way, generalizability can be achieved to a large extent.

References

- Ahmedov, I., (2020). The impact of digital economy on international trade. *European Journal of Business Management and Research*, 5(4), 1-7.
- Akhurst, J.E., Leach, M.M., (2023). Confidentiality, informed consent, and multiple relationships in four emerging regions. *Ethics & Behavior*, 33(3), 175-182.
- Bird, A., Mendenhall, M.E., (2016). From cross-cultural management to global leadership: Evolution and adaptation. *Journal of World Business*, 51(1), 115-126.
- Braun, V., Clarke, V., (2022). Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health*, 24(1), 1-6.
- Calderon-Monge, E., Ribeiro-Soriano, D., (2024). The role of digitalization in business and management: a systematic literature review. *Review of Managerial Science*, 18, 449-491.
- Castleberry, A., Nolen, A., (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807-815.
- Dai, J., Mao, X., Wu, P., Zhou, H. and Cao, L., (2024). Revolutionizing cross-border e-commerce: A deep dive into AI and big data-driven innovations for the straw-hat industry. *PLoS ONE*, 19(12), e0305639.
- Desalegn, E.G., Guedes, M.J.C., Gomes, J.F.D. and Tebeka, S.M., (2024). Disentangling organizational agility from flexibility, adaptability, and versatility: a systematic review. *Future Business Journal*, 10, 117.
- Ducato, R., (2020). Data protection, scientific research, and the role of information. *Computer Law & Security Review*, 37, 105412.
- Erlingsson, C., Brysiewicz, P., (2017). A hands-on guide to doing content analysis. *African Journal of Emergency Medicine*, 7(3), 93-99.
- Gagliani, G., (2020). Cybersecurity, technological neutrality, and international trade law. *Journal of International Economic Law*, 23(3), 723-745.
- Goldkuhl, G., (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21(2), 135-146.
- Heit, E., (2000). Properties of inductive reasoning. *Psychonomic Bulletin & Review*, 7, 569-592.
- Jebb, A.T., Parrigon, S. and Woo, S.E., (2017). Exploratory data analysis as a foundation of inductive research. *Human Resource Management Review*, 27(2), 265-276.
- Jowsey, T., Deng, C. and Weller, J., (2021). General-purpose thematic analysis: a useful qualitative method for anaesthesia research. *BJA Education*, 21(12), 472-478.
- Kedia, B.L., Mukherji, A., (1999). Global managers: developing a mindset for global competitiveness. *Journal of World Business*, 34(3), 230-251.
- Majid, M.A.A., Othman, M., Mohamad, S.F., Lim, S. and Yosof, A., (2017). Piloting for interviews in qualitative research: Operationalization and lessons learnt. *International Journal of Academic Research in Business and Social Sciences*, 7(4), 1073-1080.
- Oberlander, M., Beinicke, A. and Bipp, T., (2020). Digital competencies: A review of the literature and applications in the workplace. *Computers & Education*, 146, 103752.
- Palinkas, L.A., Horwitz, S.M., Green, C.A., Wisdom, J.P., Duan, N. and Hoagwood, K., (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544.
- Pervin, N., Mokhtar, M., (2022). The interpretivist research paradigm: A subjective notion of a social context. *International Journal of Academic Research in Progressive Education and Development*, 11(2), 419-428.
- Polfub, J., (2021). "Made in China" and Chinese brand management across cultures: A new matrix approach. *Journal of International Consumer Marketing*, 33(1), 19-37.
- Prada-Ramallal, G., Roque, F., Herdeiro, M.T., Takkouche, B. and Eigueiras, A., (2018). Primary versus secondary source of data in observational studies and heterogeneity in meta-analyses of drug effects: a survey of major medical journals. *BMC Medical Research Methodology*, 18, 97.
- Qin, S., Deng, H. and Hu, S., (2025). Digital development and China-BRICS trade: Role of institutional distance. *Finance Research Letters*, 73, 106636.
- Rahman, A., Muktadir, G., (2021). SPSS: An imperative quantitative data analysis tool for social science research. *International Journal of Research and Innovation in Social Science*, 5(10), 300-302.

- Sacavem, A., Martinez, L.F., da Cunha, J.V., Abreu, A.M. and Johnson, S.K., (2017). Charismatic leadership: A study on delivery styles, mood, and performance. *Journal of Leadership Studies*, 11(3), 21-38.
- Salifu, G.A.N., Salifu, Z., (2024). Attaining sustainable development via green economy catalysts in post-Covid-19 Africa: An analytical examination. *Sustainable Environment: An International Journal of Environmental Health and Sustainability*, 10(1), 2397860.
- Saunders, M.N.K., Lewis, P. and Thornhill, A., (2015). *Research methods for business students* (7th ed.). London: Pearson.
- Siyal, S., (2023). Editorial: Leadership and management in organizations: Perspectives from SMEs and MNCs. *Frontiers in Psychology*, 14, 1156727.
- Southern Daily Online Edition, (2024). Over the past 5 years, the total foreign trade volume of 9 cities in the Guangdong Hong Kong Macao Greater Bay Area has exceeded 35 trillion yuan. Retrieved from https://www.gd.gov.cn/gdywdt/zwzt/jfqyhl/wzwmwz/content/post_4381283.html. Accessed: February 18th, 2024.
- Southern Metropolis Daily, (2024). The port's container throughput has reached a new high, helping Guangdong's foreign trade scale to remain at the top. Retrieved from <https://www.zgsyb.com/news.html?aid=706501>. Accessed: February 18th, 2024.
- Stratton, S.J., (2021). Population research: Convenience sampling strategies. *Prehospital and Disaster Medicine*, 36(4), 373-374.
- Szkudlarek, B., Osland, J.S., Nardon, L. and Zander, L., (2020). Communication and culture in international business — Moving the field forward. *Journal of World Business*, 55(6), 101126.
- Taherdoost, H., (2021). Data collection methods and tools for research; A step-by-step guide to choose data collection technique for academic and business research projects. *International Journal of Academic Research in Management (IJARM)*, 10(1), 12.
- Tangkittipaporn, J., Songkroh, M., (2008). International trade management competencies. *International Journal of Management and Enterprise Development*, 6(1), 136-146.
- Tate, R., Bearegard, F., Peter, C. and Marotta, C., (2023). Pilot testing as a strategy to develop interview and questionnaire skills for scholar practitioners: A selection of education doctorate students' reflective vignettes. *Journal on Transforming Professional Practice*, 8(4), 23.
- Tsai, C.J., (2022). Cross-cultural leadership behavior adjustment and leader effectiveness: a framework and implications. *International Studies of Management & Organization*, 52(3-4), 205-225.
- Virtanen, Y., Jiang, Y., You, W. and Cai, H.H., (2023). International intermediaries: A systematic literature review and research agenda. *European Management Journal*, 41(6), 932-949.
- Wiles, R., Crow, G., Heath, S. and Charles, V., (2008). The management of confidentiality and anonymity in social research. *International Journal of Social Research Methodology*, 11(5), 417-428.
- Zhao, H., Gao, H. and Ding, L., (2019). The study on “middle-income trap” and China's crossing forecast: An international comparative analysis. *Open Journal of Business and Management*, 7, 1766-1778.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).