The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation

Haady Abdilnibi Altememy, College of Islamic Sciences, The Islamic University in Najaf, Iraq. Email: <u>haady.altememy@gmail.com</u>

> Haneen Hussein Ali, Al-Hadi University College, Baghdad,10011, Iraq. Email: <u>msc.Haneen.Hussein.Ali@huc.edu.iq</u>

Hasanain Ali Ismail Kalf, Al-Manara College for Medical Sciences, Maysan, Iraq. Email: <u>hasanainaliismailkalf@uomanara.edu.iq</u>

Hussein Basim Furaijl, College of Pharmacy/ University of Al-Ameed/Iraq. Email: <u>h.alfrejee@alameed.edu.iq</u>

Alhasan Ahmed Hasan, College of Education, National University of Science and Technology, Dhi Qar, Iraq. Email: <u>rathababbass2000@gmail.com</u>

Noor Qusai, Department of Management/ Al-Nisour University College, Iraq. Email: noor.q.bs@nuc.edu.iq

Khudr Bary Freeh Alsrray, College of Arts, Department of Media, Al-Esraa University, Baghdad, Iraq. Email: <u>Khuder@esraa.edu.iq</u>

Krar Muhsin Thajil, Department of Education/ Mazaya University College, Iraq. Email: <u>krarmohsin92@mpu.edu.iq</u>

ABSTRACT

The process of vendor selection has emerged as a crucial component for achieving success in the construction sector supply chain on a worldwide scale. This may be accomplished by placing emphasis on key variables pertaining to vendors, including their quality, cost, and capacity to perform work. Therefore, the current study aims to investigate the influence of work quality, work expenses, and work capacity on the process of vendor selection within the construction project supply chain in Iraq. This study examines the moderating influence of vendor reputation on the relationship between quality of work, work costs, capacity of work, and vendor selection within the construction project supply chain in Iraq. The major data for this study is obtained through the use of survey questionnaires sent to the supply chain department within the construction sector in Iraq. The present study examines the relationship between the constructs by utilising the statistical software SPSS-AMOS. The findings of the study indicate a positive correlation between vendor selection in the construction project supply chain in Iraq and the quality of work, costs of work, and capacity of work. The results of the study also revealed that the reputation of the vendor plays a significant moderating role in relation to the quality, pricing, and capacity of work, as well as the selection of vendors within the construction project supply chain in Iraq. The research supports the supply chain department in the vendor selection process, wherein the pertinent authorities assess the quality, costs, and capacity of work, as well as the vendor's reputation in the market.

Keywords: Quality of Work, Costs of Work, Capacity of Work, Vendor Selection, Construction Project Supply Chain, Vendor Reputation.

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management,* Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

1. INTRODUCTION

Contemporary organisations incorporate supply chain management methodologies as an integral component of their comprehensive business strategy. The success of the organisation is heavily reliant on its supply chain management methods and corresponding strategic approach. The phenomenon of globalisation has exerted a profound influence on the operational strategies of firms, leading to a heightened level of interconnectedness within the global business landscape. Consequently, contemporary enterprises are compelled to include their partners in supply chains, alongside their global production and transportation capacities, while simultaneously broadening their techniques for supply chain management. Additionally, it is imperative for them to shift their internal focus from conventional inwardly oriented methods to a paradigm that prioritises efficiency, expediency, and the contentment of customers. The whole operation of the supply chain encompasses three essential components (Galankashi et al., 2015). The person in charge assumes responsibility for overseeing the operational aspects related to the management of logistical capabilities, supplier selection, and the supply chain. The initiation of the literature search necessitates a comprehensive comprehension of the manner in which distinct supply chain management obligations and supplier selection responsibilities contribute to the development of the overarching supply chain management strategy, hence enhancing business performance. The management of the supply chain encompasses various tasks, such as the maintenance of supplier relationships, the participation of suppliers in business operations, the prioritisation of quality in supplier selection, the understanding of the different tiers within the supplier base, and the amplification of information (Parthiban, Zubar, & Katakar, 2013; Sumrit, 2020).

In today's competitive atmosphere, businesses are realising the impact that purchasing has on their bottom line. According to published research, "the majority of businesses spend more than half of their sales turnover on purchased parts and services today" (Luzon & El-Sayegh, 2016; Sembiring, Matondang, & Dalimunthe, 2019). A number of specialized procurement teams within firms is not unexpected, considering the substantial magnitude of this crucial and occasionally arduous process. The selection of suppliers is a critical and challenging component of the purchasing process. Therefore, the process of choosing the most suitable supplier to meet specific requirements and procure items has been extensively studied and documented in many research studies and academic publications (Sumrit, 2020). When choosing a vendor, several elements must be taken into consideration, including supply performance, supplier feedback, supplier functioning quality, supplier pricing, supplier reputation, and supplier rating (Galankashi et al., 2015; Parthiban et al., 2013; Perić & Fatović, 2015; Sembiring et al., 2019; Sumrit, 2020). The primary objective of the present study was to investigate the various elements that influence supplier performance, specifically focusing on working quality, cost, and capacity within the context of Iraq.

A significant body of literature exists on the topic of vendor selection; however, there are still several gaps that remain unaddressed. The present investigation aims to fill these gaps by examining 1) the model that encompasses factors such as vendor selection, working quality, working capacity, working cost, and vendor reputation, specifically in the context of Iraq. Notably, this model has not been tested in recent times, thus warranting further research. 2) Luzon and El-Sayegh (2016), Chai and Ngai (2020), and Sembiring et al. (2019) conducted research on the significance of quality of work as a crucial component of vendor selection criteria across various nations and historical periods, however, the present study has undertaken

an examination of additional factors, such as vendor selection, working capacity, working cost, and vendor reputation, specifically within the context of Iraq. This investigation has been conducted using a recently collected dataset, 3) Fatoni, Ridwan, and Muttaqin (2022), Beikkhakhian et al. (2015), and De Felice et al. (2015) examined the significance of factors such as the cost of work as crucial components of vendor selection criteria in various countries and time periods. However, the present study also investigates these factors, in addition to other variables including vendor selection, working capacity, working quality, and vendor reputation, specifically in the context of Iraq, utilizing a newly collected dataset, 4) Parthiban et al. (2013), Perić and Fatović (2015), and Guarnieri and Trojan (2019) have conducted research on the significance of working capacity as a crucial component of vendor selection criteria in various countries and time periods, however, the present study also examines this factor, alongside other variables such as vendor selection, quality of work, working cost, and vendor reputation, specifically in the context of Iraq, utilizing a newly collected dataset 5) In prior studies conducted by Javed et al. (2020), Zhang (2020), and Boateng and Okoe (2015), the mediating influence of reputation has been examined in various relationships, however, the current investigation aims to further explore the mediating role of reputation in the specific context of Iraq, particularly in the relationship between vendor selection, working quality, working capacity, and working cost. In the context of significance, the present study holds value as 1) it sheds light on the significance of themes such as vendor selection in a country like Iraq, which is regarded as a global player and where the manufacturing industry plays a pivotal role, 2) there is a substantial amount of existing literature on vendor selection, this study aims to contribute to the body of knowledge by examining the topic specifically within the context of Iraq, 3) offers guidance and assistance to experts in the field of supply chain management regarding vendor selection, policy review, and policy upgrading. The objective is to provide more coherent and rational solutions in this context.

2. LITERATURE REVIEW

The process of vendor selection holds significant importance not only inside the supply chain but also across the entirety of a firm's operations. The selection of an inappropriate vendor has adverse effects on the operational performance of the organisation. The absence of a vendor selection system poses a significant challenge for decision-makers in their endeavour to identify the most suitable vendor. In this context, Luzon and El-Sayegh (2016) conducted an investigation to determine the significance of the vendor's work quality in the process of vendor selection. The study centered on projects pertaining to the extraction and production of oil and gas. The study was conducted on the population residing in the United Arab Emirates. The study included a sample size of 23 firms operating within the oil and gas industries. The collection of the sample data was facilitated through the utilization of questionnaires. In order to facilitate analysis, the study utilized the Analytic Hierarchy Process (AHP) analysis approach. The research yielded data that indicate the significance of vendor quality as a crucial factor in vendor selection. Moreover, a strong correlation exists between the quality of work and the process of selecting vendors, particularly in the United Arab Emirates (UAE). In addition, the study conducted by Chai and Ngai (2020) aimed to investigate the significance of the vendor's work quality in the process of vendor selection. The inquiry comprised a comprehensive examination of the existing body of literature. The study employed a selection of publications as exemplar papers that were published between the timeframe of 2013 to 2018. The sample data articles have been gathered from various academic search engines, including Google Scholar, Sage, and Emerald. The findings derived from the analysis indicate that vendor quality is a significant consideration in the vendor selection process. Moreover, a strong correlation exists between the quality of work and the process of selecting a vendor. In their study, Gupta et al. (2016) investigated the significance of the vendor's work quality in the process of vendor selection, utilizing a weighted possibilistic method. The study's findings indicate that the vendor's quality is a significant aspect to consider when selecting a provider. Moreover, a strong correlation exists between the quality of work and the process of selecting a vendor. Furthermore, Lodha and Ramachandran (2015) conducted an investigation to determine the significance of the vendor's work quality in the process of vendor selection. The study's findings indicate that the vendor's quality is a significant aspect to consider during the vendor selection process. Moreover, a strong correlation exists between the quality of work and the selection of vendors, notably inside the United Arab Emirates (UAE). The process of "supplier selection" has gained significant recognition as a critical issue for organisations in maintaining a strategically competitive position, mostly due to its direct impact on cash flow and profitability. The supplier evaluation and selection process is characterised by several aspects that contribute to its complexity. These variables include the presence of a diverse range of influencing factors, the utilisation of both quantitative and qualitative selection criteria, and the extensive scope and heterogeneity of suppliers along the supply chain. Sembiring et al. (2019) conducted a study to investigate the significance of the vendor's work quality in the process of vendor selection, utilising a weighted possibility approach. The study's findings indicate that the vendor's quality is a significant aspect to consider during the vendor selection process. Moreover, a strong correlation exists between the quality of work and the process of selecting a vendor. Therefore, drawing from the existing literature, the paper formulated the following hypothesis:

H1: There is a nexus between quality of work and vendor selection.

The level of rivalry within the industry is subject to transformation as scientific and technological advancements progress. In order to address this issue, every business endeavors to enhance the quality of its products by employing premium-grade raw materials throughout the manufacturing process. The procurement of raw materials from vendors is a commonly employed strategy for obtaining the necessary inputs for production processes. Selecting the appropriate vendor is of utmost importance in order to mitigate the need for price comparisons, accommodate fluctuations in raw material quantities, procure raw materials of superior quality, and enhance the management of the supply chain. In enterprises engaged in large-scale production, a significant proportion of manufacturing expenses, amounting to as much as 70%, can be ascribed to the procurement of raw materials and components. In the present scenario. Fatoni et al. (2022) conducted research pertaining to the factors utilised for selecting vendors. The findings of the study suggest that pricing is a significant factor in the process of selecting a vendor. Moreover, a strong correlation exists between operational expenses and the process of choosing a vendor. In recent years, the phenomenon of globalization and the consequent economic expansion have led to heightened levels of competition. As a result, firms are compelled to adopt strategies that prioritise cost reduction and enhance operational agility in order to sustain their market position. Consequently, there has been a growing emphasis in both theoretical and practical domains on the issue of vendor selection. This pertains to the challenges associated with selecting suitable vendors and determining their quota allocations. Reputable vendors provide valuable support in terms of enhancing production flexibility,

ensuring high-quality standards, and addressing many other factors. Additionally, adhering to appropriate quotas serves as a dependable measure for achieving cost reduction. According to Beikkhakhian et al. (2015), researchers conducted a study on the factors used for selecting suppliers. The study centered on the Information Systems Management (ISM) paradigm in order to figure out the criteria for selecting vendors. The study's findings indicate that pricing is a significant consideration in the vendor selection process. Moreover, there exists a distinct correlation between operational expenses and the process of choosing a vendor. The study additionally suggested that careful consideration should be given to the cost aspect when choosing vendors in any sector of the business. The success or failure of a corporation is significantly influenced by the performance of its suppliers. When selecting a supplier, an organisation can enhance its cost and quality processes through the implementation of rational and efficient decision-making strategies. The selection of suppliers is often a complex undertaking, particularly for organisations with a diverse array of vendors and products. In the given context, De Felice et al. (2015) conducted research pertaining to the criteria utilized for the selection of suppliers. The study's findings indicate that pricing is a significant consideration in the vendor selection process. Moreover, a strong correlation exists between operational expenses and the process of choosing a vendor. The supply chain of a firm plays a crucial role in its overall performance due to the intense competition that enterprises currently encounter as a consequence of globalization. Consequently, the field of supply chain management (SCM) has garnered significant attention as an area of academic inquiry; however, different perspectives are adopted by other scholars while examining the topic. In order to thrive and maintain a competitive edge in the highly competitive global market, organizations must attain a high level of proficiency in all facets of their supply chain. In brief, it is widely recognized among successful managers that competition is more widespread inside supply chains than between individual enterprises. The significance and prevalence of supply chain management (SCM) contributions are increasing across various industries. Yet, due to the phenomenon of globalization, it is imperative for managers to consider not just economic aspects but also environmental and social challenges (Sumrit, 2020). The acceptance of an expanded perspective leads to the emergence of a novel approach known as sustainability. Business enterprises are facing heightened pressure to adopt sustainable practices as a result of the rapid depletion of natural resources, pervasive concerns over wealth inequality, and the imperative of corporate social responsibility. Various stakeholders, including governments, customers, for-profit organizations, and nonprofit entities, exert considerable influence on enterprises, compelling them to adopt sustainable practices and manufacture environmentally friendly products. Additionally, Banaeian et al. (2018) investigated the significance of the cost of work vendor in the process of vendor selection. The study centered on the utilization of fuzzy group decision-making approaches. The study was conducted in the agri-food sector. The findings of the study indicate that the cost of the vendor is a significant element to consider when selecting a vendor. Moreover, a strong correlation exists between the cost of vendors and the process of selecting vendors. Therefore, drawing from the existing body of knowledge, the paper formulated the hypothesis as follows:

H2: There is a nexus between the cost of work and vendor selection.

Vendor selection is a systematic process involving the examination, evaluation, and ultimate determination of vendors who will be integrated into the supply chain of a firm. The process of vendor selection encompasses four key stages, including goal establishment, identification of evaluation criteria and sub-criteria, pre-qualification of potential applicants, and final

decision-making. One commonly encountered challenge in the field of decision-making including multiple criteria is the selection of a vendor. The evaluation and selection of vendors necessitate the utilization of many criteria to effectively assess the performance of suppliers in terms of their current and future value propositions. The selection of a vendor involves the consideration of various factors, with one of the key considerations being the vendor's work capability. In the present study, Parthiban et al. (2013) investigated the significance of work capacity in the process of vendor selection and examined the potential consequences of its absence in the selection process. The study centered on strategic decision-making. The study's findings indicate that the work capacity is a significant consideration in the vendor selection process. Moreover, a strong correlation exists between the ability to work and the process of choosing a vendor. One of the primary considerations in the procurement process within the manufacturing industry pertains to the selection of vendors and the establishment of supply quotas. When all selected vendors are capable of adequately meeting the buyer's requirements, the selection process is subsequently narrowed down to choosing the vendor that provides the optimal value in terms of purchase prices, product quality, and vendor reliability. Perić and Fatović (2015) conducted a study to investigate the significance of work capacity in the process of vendor selection and the potential consequences of its absence on the selection process. The study centred on strategic decision-making. The study's findings indicate that the selection of the vendor is influenced by the capacity of work, which is identified as a significant factor. Moreover, a strong correlation exists between the ability to work and the process of choosing a vendor. Significant adjustments have been observed in the vendor selection process throughout the course of the last two decades. The alterations made to the vendor selection procedure encompass higher quality criteria, enhanced computer connectivity, and more modern technological capabilities. These modifications are of significant importance. In the present study, Nirmal (2015) investigated the significance of work capacity in the process of vendor selection and examined the potential issues that may arise in its absence. The study centred on the analysis of strategic decision-making. The study's findings indicate that work capacity is a significant consideration in vendor selection. Moreover, a strong correlation exists between the ability to work and the process of selecting a vendor. The decision-making process include the selection of raw material providers, a critical factor since the optimal choice of suppliers has the potential to enhance a company's performance and competitive advantage. One of the primary factors to be taken into account while determining the criteria for supplier firms is the necessity for rubber raw materials to adhere to the SIR standard. The process of supplier selection necessitated the establishment of multiple criteria and sub-criteria, which were derived from expert assessments. The imperative for organisations to address sustainability concerns in their operations stems from the heightened public consciousness of environmental and sustainability matters, stringent governmental mandates, and the growing comprehension within communities. The selection of suppliers that prioritise green practises and sustainability is a critical decision within industrial supply chains, as it contributes to enhancing corporate performance and gaining a competitive edge. The sustainability-focused supply chain can be considered an evolution of the green supply chain, as it incorporates social criteria with economic and environmental factors (Parthiban et al., 2013). Guarnieri and Trojan (2019) conducted an investigation to determine the significance of working capacity in the process of vendor selection. The study was conducted on the population of China. The study employed a sample including 43 companies operating within the oil and gas industries. The data sample was obtained through the utilization of questionnaires. In order to facilitate

analysis, the study utilized the Analytic Hierarchy Process (AHP) analysis approach. The investigation yielded findings that indicate the significance of a vendor's operating capability in the vendor selection process. Moreover, there exists a distinct correlation between the operating capability of vendors and the process of selecting vendors. Therefore, drawing upon the existing body of information, the paper formulated the following hypothesis:

H3: There is a nexus between the capacity of work and vendor selection.

The vendor's reputation is a significant factor that has a substantial impact on the relationship between the vendor's operating capability and the process of vendor selection. The selection of a supplier is often influenced by the vendor's reputation. The vendor's reputation inside the sector serves as an additional marketing approach that appeals to customers. Consequently, the association between the quality of vendor work and the process of vendor selection may be subject to the influence of vendor reputation. In the realm of moderation, Al-Shammari (2015) conducted an investigation into the potential moderating role of reputation in the relationship between corporate social responsibility (CSR) and firm performance. The study was conducted on the Chinese population. The research utilised a sample of data collected from a total of 60 companies. The data sample was obtained through the utilisation of questionnaires. In order to facilitate analysis, the study utilised the Autoregressive Distributed Lag (ARDL) analysis approach. The findings derived from the analysis indicate that reputation plays a crucial role as a moderator in the relationship between corporate social responsibility (CSR) and firm performance. Similarly, Boateng and Okoe (2015) undertook a study to examine the potential moderating role of reputation in the relationship between consumer attitude and consumer behavior. The study was conducted on the population of China. The study employed a sample size of 441 respondents for data analysis. The data sample was obtained through the utilization of questionnaires. In order to facilitate analysis, the study utilized the hierarchical regression analysis methodology. The findings obtained from the analysis indicate that reputation plays a crucial role as a moderator in the relationship between consumer attitude and consumer behavior. Therefore, drawing upon the existing literature, the paper formulated the following hypothesis:

H4: Vendor reputation significantly moderates the nexus between quality of work and vendor selection.

The reputation of a vendor is a crucial element that influences the relationship between vendor cost and vendor selection. The reputation of a vendor often influences the firm's decision in selecting a provider. The reputation of a vendor in the market serves as a marketing strategy that appeals to clients. Hence, the reputation of the vendor has the potential to influence the association between vendor cost and vendor selection. Zhang (2020) conducted a study to examine the potential moderating role of reputation in the relationship between visual information and consumer purchase intentions within the setting of moderation. The investigation was carried out on the population of Malaysia. The study employed a sample size of 300 respondents for data analysis. The data sample was obtained through the utilization of questionnaires. In order to facilitate analysis, the study utilized the hierarchical regression analysis methodology. The findings derived from the analysis indicate that reputation plays a crucial role as a moderator in the relationship between visual information and customer purchase intentions. Similarly, In the study conducted by Acquaah (2003), the objective was to investigate the potential moderating role of reputation in the relationship between organizational competence and firm-specific Tobin's-q. The study was conducted on the populace of China. The study

employed a sample of 74 firms to gather data. The collection of the sample data was facilitated through the utilization of questionnaires. In order to facilitate analysis, the study utilised the multiple linear regression (MLR) analysis approach. The findings obtained from the analysis indicate that reputation plays a crucial role in moderating the relationship between organizational competency and businesses' unique Tobin's q. Therefore, drawing from the existing body of knowledge, the paper formulated the hypothesis as follows:

H5: Vendor reputation significantly moderates the nexus between the cost of work and vendor selection.

Vendor selection is a critical procedure that involves the thorough examination, evaluation, and ultimate determination of the providers that will be incorporated into a company's supply chain. The vendor selection process encompasses four key activities, namely: setting objectives, selecting evaluation criteria and sub-criteria, pre-qualifying candidates, and making decisions. The process of selecting a vendor is a common instance of a multicriteria decision-making dilemma. In order to assess the performance of providers who contribute value in both the now and the future, it is imperative to employ a diverse range of selection and evaluation criteria. The reputation of a vendor is a crucial factor that influences the relationship between vendor working capacity and vendor selection. The reputation of a vendor often influences the firm's decision in selecting a provider. The reputation of a vendor in the market serves as a marketing strategy that appeals to clients. Hence, the reputation of the vendor has the potential to impact the association between the operating capacity of the vendor and the process of vendor selection. Pham and Tran (2020) conducted a study to examine the potential moderating role of reputation in the relationship between corporate social responsibility (CSR) and firm performance. The study was conducted on a global sample of enterprises. The research employed a sample of 3588 enterprises from various geographic locations. The data sample was obtained through the utilisation of questionnaires. In order to facilitate analysis, the study utilised the autoregressive distributed lag (ARDL) analysis approach. The findings derived from the analysis indicate that reputation plays a crucial role as a moderator in the relationship between corporate social responsibility (CSR) and firm performance. In a similar vein, the study conducted by Javed et al. (2020) sought to investigate the potential moderating role of reputation in the relationship between corporate social responsibility (CSR), leadership, and business performance. The investigation was carried out on the population of Pakistan. The study employed a sample size of 224 respondents for data analysis. The data sample was obtained through the utilization of questionnaires. In order to facilitate analysis, the study utilized the Multiple Linear Regression (MLR) analysis approach. The findings derived from the analysis indicate that reputation plays a substantial role in moderating the relationship between corporate social responsibility (CSR), leadership, and business performance. Therefore, drawing from the existing literature, the paper formulated the following hypothesis:

H6: Vendor reputation significantly moderates the nexus between the capacity of work and vendor selection.

3. RESEARCH METHODOLOGY

This study is focused on examining the influence of work quality, work costs, and work capacity on the process of vendor selection within the construction project supply chain in

Iraq. Additionally, it seeks to explore the potential moderating effect of vendor reputation on the relationship between work quality, work costs, work capacity, and vendor selection. The core data for this study is obtained from survey questionnaires administered to the supply chain department of the construction sector in Iraq. The factors in this study are assessed by the utilization of items derived from previous scholarly works. For example, this study incorporates various dimensions to assess different aspects of work. The quality of work is evaluated using a three-item scale derived from Santos, Murmura, and Bravi (2019) research. The costs associated with the work are measured using a four-item scale extracted from Sarmah, Acharya, and Goyal (2006) study. The capacity of work is assessed through six questions adapted from Tarhini, Karam, and Jaber (2020) research. Vendor reputation is evaluated using a five-item scale taken from Thanh (2022) work. Lastly, the vendor selection process is examined using a five-item scale adopted from Shen and Yu (2013) study.

The individuals who participated in this study were the employees working in the supply chain department of construction projects. The surveys were sent to the designated personnel through in-person visits. The researchers distributed a total of 576 surveys, of which 294 were successfully collected, indicating a response rate of roughly 51.04%. Additionally, this current study examines the relationship between the constructs utilizing the statistical software SPSS-AMOS. According to Hair, Gabriel, and Patel (2014), this tool demonstrates efficacy in handling primary data and generating optimal results through the utilization of extensive data sets and intricate models. The study included three distinct independent variables, namely the quality of work (QW), costs of work (CW), and capacity of work (CPW). Furthermore, the research also incorporated a moderating variable referred to as vendor reputation (VR) and a dependent variable known as vendor selection (VS). The variables referenced in Figure 1 are enumerated.

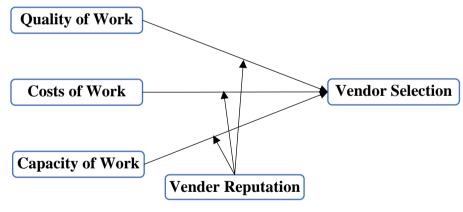


Figure 1: Research model

4. **RESEARCH FINDINGS**

The results indicate the correlation between the items, which has been assessed using composite reliability (CR) with values exceeding 0.70. Furthermore, the examination of factor loadings and average variance extracted (AVE) is conducted, with values exceeding 0.50. The results of this study demonstrated a strong positive association between the items. The aforementioned results are presented in Table 1.

Constructs		Items		Loadings	CR	AVE	MSV	ASV
Quality of Work	QW1	<	QW	0.831	0.831	0.622	0.430	0.265
	QW2	<	QW	0.751				
	QW3	<	QW	0.781				
Costs of Work	CW1	<	CW	0.996	0.928	0.767	0.401	0.143
	CW2	<	CW	0.770				
	CW3	<	CW	0.739				
	CW4	<	CW	0.967				
Vendor Reputation	VR1	<	VR	0.758	0.916	0.694	0.213	0.085
-	VR2	<	VR	0.990				
	VR3	<	VR	0.613				
	VR4	<	VR	0.753				
	VR5	<	VR	0.985				
Vendor Selection	VS1	<	VS	0.659	0.760	0.588	0.330	0.290
	VS2	<	VS	0.608				
	VS3	<	VS	0.584				
	VS4	<	VS	0.601				
	VS5	<	VS	0.659				
Capacity of Work	CPW1	<	CPW	0.587	0.902	0.619	0.365	0.148
	CPW2	<	CPW	1.001				
	CPW3	<	CPW	0.697				
	CPW4	<	CPW	0.886				
	CPW5	<	CPW	0.469				
	CPW6	<	CPW	0.937				

Table 1: Convergent Validity

The results also indicate the correlation between the variables, which is evaluated using the Fornell Larcker criterion. It is observed that the first value in the column is greater than the subsequent values. The results of this study suggest a weak association between the variables. The results are presented in Table 2.

Table 2:	Discriminant	Validity
----------	--------------	----------

	VS	QW	CW	VR	CPW
VS	0.723				
QW	0.656	0.788			
CW	0.389	0.633	0.876		
VR	0.461	0.275	0.005	0.833	
CPW	0.604	0.392	0.142	0.231	0.787

In addition, the article critically analyses the paradigm of optimal physical fitness. The Tucker-Lewis index (TLI) is employed for verification, with values exceeding 0.90. The examination of this is likewise conducted through the utilization of the comparative fit index (CFI), with the observed values also above the threshold of 0.90. Lastly, the adequacy of the model is assessed by calculating the root mean square error of approximation (RMSEA), with all resulting values falling below the threshold of 0.05. The figures exposed model demonstrates a strong alignment. The aforementioned data is presented in Table 3.

Table 3: Model Good Fitness

Selected Indices	Result	Acceptable level of fit
TLI	0.901	TLI > 0.90
CFI	0.902	CFI > 0.90
RMSEA	0.002	RMSEA < 0.05 good; 0.05 to 0.10 acceptable

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management*, Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

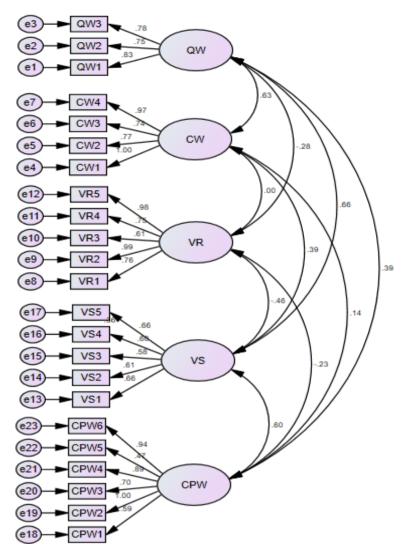


Figure 2: Measurement Model Assessment

The results of the study demonstrate a favorable relationship between vendor selection in the construction project supply chain in Iraq and the quality of work, costs of work, and capacity of work. This supports the acceptance of hypotheses H1, H2, and H3. likewise, the results of the study indicate that the reputation of the vendor has a substantial moderating role in the relationship between the quality of work, expenses of work, capacity of work, and vendor selection within the construction project supply chain in Iraq. This finding supports the acceptance of hypotheses H4, H5, and H6. The aforementioned correlations are presented in Table 4.

Table	4:	Path	Ana	lysis
-------	----	------	-----	-------

Relationships			Beta	S.E.	C.R.	Р
Vendor Selection	<	Quality of Work	0.550	0.035	15.669	0.000
Vendor Selection	<	Costs of Work	0.041	0.021	1.952	0.048
Vendor Selection	<	Capacity of Work	0.230	0.031	7.378	0.000
Vendor Selection	<	Vendor Reputation	0.310	0.060	5.208	0.000
Vendor Selection	<	CW x VR	0.037	0.011	3.248	0.001
Vendor Selection	<	QW x VR	0.230	0.013	17.217	0.000
Vendor Selection	<	CPW x VR	0.042	0.013	3.149	0.002

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management,* Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

183

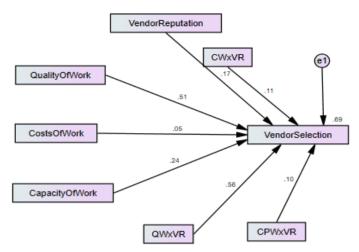


Figure 3: Structural Model Assessment

5. **DISCUSSIONS**

The findings of the study indicate that the quality of work has a favorable impact on the process of selecting vendors. The findings presented in the study conducted by Komsiyah, Wongso, and Pratiwi (2019) provide support for the notion that various resources, including raw materials and services, are essential for commercial enterprises to effectively execute their production and marketing strategies. In order to prioritize the quality of work and products or services, organizations seek to engage with suppliers who offer superior quality things and services. Therefore, the selection of vendors is influenced by the quality of work. These findings are consistent with the research conducted by Radulescu and Radulescu (2023), which also suggests that when a firm is experiencing high-quality work within the organization and seeks to maintain work quality, it is advisable to compile a list of suppliers who can provide quality things or services. Consequently, there exists the potential for a favorable selection of a seller.

The findings indicate that there is a positive correlation between the cost of work and the selection of vendors. The findings presented in Krishankumar, Ravichandran, and Tyagi (2020) study provide support for the notion that company costs play a significant role in determining business performance and profitability by directly opposing corporate revenues. The cost management department has implemented a policy that emphasizes the commitment to efficient procurement processes in order to mitigate the potential financial burden associated with business infrastructure and production expenses. In this scenario, vendors who offer comparable quality at a reduced cost are chosen. These findings are consistent with the research conducted by Bhatt et al. (2021). Based on this study, the proficient administration of work expenses, wherein the cost burden endeavors to be alleviated without compromising on quality, serves as a catalyst for businesses to prioritize the enhancement of vendor selection.

The findings indicate that there is a favourable correlation between job capacity and vendor selection. The findings presented in this study are consistent with the findings of Sumrit (2020), who emphasises the significance of the working capacity of resources and the performance capacity of people in relation to achieving company goals and gaining competitive advantages. The necessity for an augmentation in job capacity necessitates the implementation of a proficient vendor selection process. The findings presented in this study align with the research conducted by Zaretalab, Hajipour, and Tavana (2020), suggesting that the inclusion of vendors who offer resources of superior work quality facilitates a streamlined and efficient vendor selection process.

The findings indicate that the reputation of a vendor has a notable impact on both the quality of work produced and the process of selecting a vendor. These findings are consistent with the findings of Santos et al. (2019), who argue that when certain suppliers have a favourable reputation in the market, the resources obtained from these vendors are anticipated to exhibit greater functional quality. The positive perceptions of the quality of work performed by resources contribute to the facilitation of an efficient vendor selection process. The findings presented in this study are corroborated by Hristakeva (2022) research, which suggests that a positive vendor reputation is associated with high-quality work and facilitates the process of selecting vendors effectively. Moreover, it contributes to the establishment of stronger relationships between the quality of work and the selection of vendors.

The findings of the research indicate that the reputation of a vendor has a considerable impact on both the cost of work and the process of vendor selection. The findings presented in the study conducted by Yousefi et al. (2019) provide support for the notion that the availability of high-quality information regarding the reputation of vendors enables informed decisionmaking regarding cost considerations, leading to effective vendor selection. The results presented in this study are consistent with the assertions made by Ventura et al. (2021). According to their research, the reputation of a vendor plays a crucial role in enhancing the management of work costs and refining the process of selecting vendors. This, in turn, leads to an improved link between the cost of work and the selection of vendors. The results indicate that the reputation of a vendor has a notable impact on both the ability to complete work and the process of selecting a provider. The findings presented in this study are corroborated by the research conducted by Aouadni, Aouadni, and Rebaï (2019), which asserts that a favorable reputation of vendors is associated with the acquisition of resources that possess a high capacity for work. Furthermore, the study reveals that the relationship between the capacity of work and vendor selection is more pronounced when the selection process is conducted diligently. The findings presented in this study are consistent with the research conducted by Taherdoost and Brard (2019), suggesting that a positive vendor reputation enhances the significance of work capacity in the process of vendor selection.

6. POLICY IMPLICATION

The research community can extract valuable information from the present article for use as future reference or guidance. This research investigates the impact of work quality, cost of work, and capacity of work on the process of vendor selection while considering the moderating role of vendor reputation in the relationship between these characteristics and vendor selection. The research provides guidelines for organizations involved in building projects with a supply chain in Iraq or other nations, outlining strategies for effective vendor selection. The study suggests that in order to achieve effective vendor selection, there is a need for improvement in the quality of work. The study further suggests that corporate management should endeavor to minimize labor expenses in order to facilitate optimal vendor choices. There is a proposition that organizations should prioritize their work capacity and, thus, engage in effective vendor selection. The research supports the supply chain department in the vendor selection process, wherein the pertinent authorities are responsible for assessing the quality, costs, and capacity of work, as well as the vendor's market reputation. A recommendation suggests that when organizations have access to reliable information about a vendor's reputation, they are more likely to prioritize factors such as job quality, cost reduction, and capacity improvement. This could potentially lead to the identification of suitable vendors.

7. CONCLUSION

The objective of this study was to examine the impact of work quality, cost of work, and capacity of work on the selection of vendors, while also investigating the function of vendor reputation in relation to these criteria and vendor selection. The data necessary for this study were obtained from the supply chain of a building project in Iraq. The findings revealed a significant correlation between work quality, cost of work, and capacity of work in relation to vendor selection. The research findings indicate that organisations that prioritise the quality of work and recognise the importance of high-quality products or services are inclined to engage with suppliers that can provide the desired level of quality. Therefore, it is feasible to achieve efficient vendor selection. The findings of the study indicate that the business's inclination to mitigate labor costs enhances procurement management and facilitates efficient vendor selection. The investigation moreover determined that when a company organization sustains the operational capabilities of its resources and staff, it actively seeks reputable vendors and exercises careful discernment in vendor selection. The research findings indicate that the reputation of a vendor plays a crucial role in moderating the relationship between work quality, work cost, work capacity, and the process of selecting a vendor. The study suggests that businesses prioritize factors such as work quality, work cost management, and work capacity enhancement when considering vendor reputation. Consequently, these organizations are more likely to make effective vendor selections.

8. LIMITATIONS

This research exhibits certain shortcomings, necessitating further improvement in future scholarly endeavors. The vendor selection process has mostly focused on analyzing criteria such as work quality, cost of work, and capacity of work. The writers should also include insights into issues such as business size, risk management, and access to vendors, which are equally important in the process of vendor selection. Furthermore, the research has been only performed using data derived from the supply chain of the construction project. The implications of the study are not applicable in a generic context. Hence, it is imperative to obtain data from various service and manufacturing sectors.

REFERENCES

- Acquaah, M. (2003). Organizational Competence and Firm-Specific Tobin's q: The Moderating Role of Corporate Reputation. *Strategic Organization*, 1(4), 383-411. <u>https://doi.org/10.1177/14761270030014002</u>
- Al-Shammari, M. A. (2015). Corporate Social Responsibility and Firm Performance: The Moderating Role of Reputation and Institutional Investors. *International Journal of Biometrics*, 10(6), 15-28. <u>https://doi.org/10.5539/ijbm.v10n6p15</u>
- Aouadni, S., Aouadni, I., & Rebaï, A. (2019). A systematic review on supplier selection and order allocation problems. *Journal of Industrial Engineering International*, 15(1), 267-289. <u>https://doi.org/10.1007/s40092-019-00334-y</u>
- Banaeian, N., Mobli, H., Fahimnia, B., Nielsen, I. E., & Omid, M. (2018). Green supplier selection using fuzzy group decision making methods: A case study from the agri-food industry. *Computers & Operations Research*, 89, 337-347. <u>https://doi.org/10.1016/j.cor.2016.02.015</u>

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management*, Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

- Beikkhakhian, Y., Javanmardi, M., Karbasian, M., & Khayambashi, B. (2015). The application of ISM model in evaluating agile suppliers selection criteria and ranking suppliers using fuzzy TOPSIS-AHP methods. *Expert Systems with Applications*, 42(15), 6224-6236. https://doi.org/10.1016/j.eswa.2015.02.035
- Bhatt, N., Guru, S., Thanki, S., & Sood, G. (2021). Analysing the factors affecting the selection of ERP package: a fuzzy AHP approach. *Information Systems and e-Business Management*, 19(2), 641-682. <u>https://doi.org/10.1007/s10257-021-00521-8</u>
- Boateng, H., & Okoe, A. F. (2015). Consumers' attitude towards social media advertising and their behavioural response. *Journal of Research in Interactive Marketing*, 9(4), 299-312. <u>https://doi.org/10.1108/JRIM-01-2015-0012</u>
- Chai, J., & Ngai, E. W. T. (2020). Decision-making techniques in supplier selection: Recent accomplishments and what lies ahead. *Expert Systems with Applications, 140*, 112903. https://doi.org/10.1016/j.eswa.2019.112903
- De Felice, F., Deldoost, M. H., Faizollahi, M., & Petrillo, A. (2015). Performance Measurement Model for the Supplier Selection Based on AHP. *International Journal* of Engineering Business Management, 7, 17. <u>https://doi.org/10.5772/61702</u>
- Fatoni, M. I., Ridwan, A. Y., & Muttaqin, P. S. (2022). Design of Vendor Selection System Using FAHP and FTOPSIS in Engineering-To-Order Manufacturing Industry. In *Conference on Broad Exposure to Science and Technology 2021 (BEST 2021)* (pp. 373-380). Atlantis Press. <u>https://doi.org/10.2991/aer.k.220131.055</u>
- Galankashi, M. R., Chegeni, A., Soleimanynanadegany, A., Memari, A., Anjomshoae, A., Helmi, S. A., & Dargi, A. (2015). Prioritizing Green Supplier Selection Criteria Using Fuzzy Analytical Network Process. *Procedia CIRP*, 26, 689-694. <u>https://doi.org/10.1016/j.procir.2014.07.044</u>
- Guarnieri, P., & Trojan, F. (2019). Decision making on supplier selection based on social, ethical, and environmental criteria: A study in the textile industry. *Resources, Conservation* and *Recycling,* 141, 347-361. <u>https://doi.org/10.1016/j.resconrec.2018.10.023</u>
- Gupta, P., Govindan, K., Mehlawat, M. K., & Kumar, S. (2016). A weighted possibilistic programming approach for sustainable vendor selection and order allocation in fuzzy environment. *The International Journal of Advanced Manufacturing Technology*, 86(5), 1785-1804. <u>https://doi.org/10.1007/s00170-015-8315-4</u>
- Hair, J. F., Gabriel, M., & Patel, V. (2014). AMOS covariance-based structural equation modeling (CB-SEM): Guidelines on its application as a marketing research tool. *Brazilian Journal of Marketing*, 13(2), 44-55. <u>https://ssrn.com/abstract=2676480</u>
- Hristakeva, S. (2022). Vertical contracts with endogenous product selection: An empirical analysis of vendor allowance contracts. *Journal of Political Economy*, 130(12), 3202-3252. <u>https://doi.org/10.1086/720631</u>

Javed, M., Rashid, M. A., Hussain, G., & Ali, H. Y. (2020). The effects of corporate social

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management,* Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

responsibility on corporate reputation and firm financial performance: Moderating role of responsible leadership. *Corporate Social Responsibility and Environmental Management*, 27(3), 1395-1409. <u>https://doi.org/10.1002/csr.1892</u>

- Komsiyah, S., Wongso, R., & Pratiwi, S. W. (2019). Applications of the Fuzzy ELECTRE Method for Decision Support Systems of Cement Vendor Selection. Procedia Computer Science, 157, 479-488. <u>https://doi.org/10.1016/j.procs.2019.09.003</u>
- Krishankumar, R., Ravichandran, K. S., & Tyagi, S. K. (2020). Solving cloud vendor selection problem using intuitionistic fuzzy decision framework. *Neural Computing and Applications*, 32(2), 589-602. <u>https://doi.org/10.1007/s00521-018-3648-1</u>
- Lodha, S., & Ramachandran, M. (2015). Need of Multi criteria decision making in Vendor Selection for the Automobile Industry. *International Journal of Applied Engineering Research*, 10(11), 10301-10304. <u>https://www.researchgate.net/publication/274582999</u>
- Luzon, B., & El-Sayegh, S. M. (2016). Evaluating supplier selection criteria for oil and gas projects in the UAE using AHP and Delphi. *International Journal of Construction Management*, 16(2), 175-183. <u>https://doi.org/10.1080/15623599.2016.1146112</u>
- Nirmal, N. P. (2015). Modelling of Vendor Selection Problem for Conventional Lathe Machine Bed by Fuzzy Inference Decision Support System. *IJSRD - International Journal for Scientific Research & Development*, 3(10), 678-681. <u>https://www.ijsrd.com/articles/IJSRDV3I100526.pdf</u>
- Parthiban, P., Zubar, H. A., & Katakar, P. (2013). Vendor selection problem: a multi-criteria approach based on strategic decisions. *International Journal of Production Research*, 51(5), 1535-1548. <u>https://doi.org/10.1080/00207543.2012.709644</u>
- Perić, T., & Fatović, M. (2015). Vendor Selection and Supply Quotas Determination by Using Revised Weighting Method and Multi-Objective Programming Methods. International Journal of Computer and Information Engineering, 9(6), 1496-1502. <u>https://publications.waset.org/10001852/vendor-selection-and-supply-quotasdetermination-by-using-revised-weighting-method-and-multi-objective-programmingmethods</u>
- Pham, H. S. T., & Tran, H. T. (2020). CSR disclosure and firm performance: The mediating role of corporate reputation and moderating role of CEO integrity. *Journal of Business Research*, 120, 127-136. <u>https://doi.org/10.1016/j.jbusres.2020.08.002</u>
- Radulescu, C. Z., & Radulescu, M. (2023). A Hybrid Multi-Criteria Approach to the Vendor Selection Problem for Sensor-Based Medical Devices. *Sensors*, 23(2), 764. <u>https://doi.org/10.3390/s23020764</u>
- Santos, G., Murmura, F., & Bravi, L. (2019). Developing a model of vendor rating to manage quality in the supply chain. *International Journal of Quality and Service Sciences*, *11*(1), 34-52. <u>https://doi.org/10.1108/IJQSS-06-2017-0058</u>

Altememy, H. A., Ali, H. H., Kalf, H. A. I., Furaijl, H. B., Hasan, A. A., Qusai, N., Alsrray, K. B. F., Thajil, K. M (2023) The Role of Important Factors Affecting the Vendor Selection in the Construction Project Supply Chain: Moderating Role of Vender Reputation. *International Journal of Construction Supply Chain Management*, Vol. 13, No. 1 (pp. 173-189). DOI: 10.14424/ijcscm2023130110

- Sarmah, S. P., Acharya, D., & Goyal, S. K. (2006). Buyer vendor coordination models in supply chain management. *European Journal of Operational Research*, 175(1), 1-15. https://doi.org/10.1016/j.ejor.2005.08.006
- Sembiring, N., Matondang, N., & Dalimunthe, A. R. (2019). Supplier selection in rubber industry using analytic network process (ANP) and technique for order preference methods by similarity to ideal solution. *IOP Conference Series: Materials Science and Engineering*, 508(1), 012091. <u>https://doi.org/10.1088/1757-899X/508/1/012091</u>
- Shen, C.-Y., & Yu, K.-T. (2013). Strategic Vender Selection Criteria. *Procedia Computer Science*, 17, 350-356. <u>https://doi.org/10.1016/j.procs.2013.05.045</u>
- Sumrit, D. (2020). Supplier selection for vendor-managed inventory in healthcare using fuzzy multi-criteria decision-making approach. *Decision Science Letters*, 9(2), 233-256. http://dx.doi.org/10.5267/j.dsl.2019.10.002
- Taherdoost, H., & Brard, A. (2019). Analyzing the Process of Supplier Selection Criteria and Methods. *Procedia Manufacturing*, 32, 1024-1034. <u>https://doi.org/10.1016/j.promfg.2019.02.317</u>
- Tarhini, H., Karam, M., & Jaber, M. Y. (2020). An integrated single-vendor multi-buyer production inventory model with transshipments between buyers. *International Journal* of Production Economics, 225, 107568. <u>https://doi.org/10.1016/j.ijpe.2019.107568</u>
- Thanh, N. V. (2022). Designing a MCDM Model for Selection of an Optimal ERP Software in Organization. *Systems*, *10*(4), 95. <u>https://doi.org/10.3390/systems10040095</u>
- Ventura, J. A., Bunn, K. A., Venegas, B. B., & Duan, L. (2021). A coordination mechanism for supplier selection and order quantity allocation with price-sensitive demand and finite production rates. *International Journal of Production Economics*, 233, 108007. <u>https://doi.org/10.1016/j.ijpe.2020.108007</u>
- Yousefi, N., Lu, X., Elimelech, M., & Tufenkji, N. (2019). Environmental performance of graphene-based 3D macrostructures. *Nature Nanotechnology*, 14(2), 107-119. <u>https://doi.org/10.1038/s41565-018-0325-6</u>
- Zaretalab, A., Hajipour, V., & Tavana, M. (2020). Redundancy allocation problem with multistate component systems and reliable supplier selection. *Reliability Engineering & System Safety*, 193, 106629. <u>https://doi.org/10.1016/j.ress.2019.106629</u>
- Zhang, Z. (2020). Exploring the Impact of Visual Information on Ethnic Restaurants Purchase Intention in Food Ordering Apps and the Moderating Role of Reputation, Cosmopolitanism and Cultural Values (Doctoral Dissertation, Concordia University). https://spectrum.library.concordia.ca/id/eprint/987773