

The effect of supply chain management through social media on competitiveness of the private hospitals in Jordan

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ABSTRACT

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The aim of this research is to examine the impact of supply chain management through social media on competitiveness of the private hospitals in Jordan. The population of the study includes managers in various administrative disciplines. Therefore, the complete census method was used in this research to collect the primary data, where the total responses were 438 responses were used for analysis. The questionnaire was used as a basic instrument in the current research, as it was designed electronically through Google Forms and sent to the research sample via email. AMOS software was used to test the research hypotheses. The results showed that all dimensions of supply chain management through social media had a positive impact on competitiveness; the greatest effect was for strategic relations with suppliers. Based on the study results; managers at the examined companies should enhance their usage of social media with suppliers, according to the report, in order to support strategic connections with them.

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1. Introduction

Contemporary institutions practice their business and activities in a turbulent and competitive environment, in addition to the continuous developments in information technology and the continuous change of customer needs, which force business organizations to adapt to meet those renewable needs (Altarifi et al., 2015; Al-Qudah et al., 2012; Al-Hawary & Obiadat, 2021; Xiaole & Piscunova, 2022; Alwan et al., 2022; Tariq et al., 2022; Al-Hawary & Alhajri, 2020). Industrial organizations faced new concepts such as total quality management, production on time, supplier relations, customer relations, and other concepts that helped them solve their problems (Winkler et al., 2022; Alwan et al., 2022; AlTaweel & Al-Hawary, 2021; Al-Shorman et al., 2021; Al-Quran et al., 2020; Eldahamshah et al., 2020). The concept of supply chain management emerged as one of the contemporary concepts that solve organizations' problems with the surrounding environment, especially those related to the environment and social responsibility (Al-khawaldah et al., 2022; Aityassine et al., 2022). Supply chain practices represent several relationships in which the internal functions overlap with the external for their members. The success of this chain calls for the importance of integration, participation, and coordination between the parties in marketing, production, supply, selling, and shipping, which helps to achieve competitive advantage, which requires a long-term relationship between the organization and its suppliers (Manfredi & Capik, 2022; Al-Hawary et al., 2017). To take advantage of individuals' and organizations' strategic and operational capabilities and engage with them in order to assist them in achieving significant continuous benefits and to simplify the description of production-related tasks such as the supply of

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basic goods to the factory and the distribution of products after they have been manufactured. Furthermore, the logistics firm is eager to provide a professional flow of goods that maintains production continuity in the most efficient manner possible, taking into account costs, service levels, and other critical logistical concerns. (Othman et al., 2022).

The significance of this concept grew in tandem with the technological change brought about by social media in organizational operations, particularly marketing (Al-Hawary & Al-Syasneh, 2020). Incorporating social communication into firms' relationships with individuals and consumers resulted in a slew of perks and advantages that made communication and goal-setting easier and faster. Social networks, particularly social media, aided in the maintenance of direct links and communication between the factory and the final consumer, as well as making it easier for marketers to detect client preferences and issues (Zeng et al., 2022). It was also feasible to get immediate input from them, which boosted the businesses' flexibility and speed in responding to customer requests. It also strengthened supplier connections and empowered enterprises by allowing them to retain long-term partnerships with them (Ambrogio et al., 2022).

Academics, consultants, and managers are increasingly interested in the concept of supply chain management using social media (Pimenta et al., 2022; Kraus et al., 2022). Many businesses have realized that using social media to manage supply chains is a critical component of achieving a competitive advantage in products or services in congested markets. Manufacturers operate in a highly competitive market marked by increased worldwide competition and escalating client demands (Sodhi et al., 2019). Furthermore, as the new competitive environment becomes more global and technology-oriented, the shorter the product life cycle becomes, the faster new products are introduced, and customers continue to demand higher levels of quality, faster responses to their needs, and higher reliability of goods and services. As industries progressed and the number of industrial companies increased in Jordan, the markets shifted from monopoly markets to competitive ones. The competitive strength between these companies intensified, which led to a decrease in the market shares of the companies that were monopolized in favor of the competing companies. The industry also suffered in general from a weak relationship with some suppliers, which affected their ability to meet the desires of customers, which led to pressure to reduce the price of the product. Hence, the study problem was found to examine the possibility of the impact of supply chain management through social media on the activities of these companies, their competition, and market share.

2. Theoretical framework and hypotheses development

2.1 Supply chain through social media

Companies in the new global era are forced to meet the requirements of customers in various ways, and perhaps the methods that support the flexibility of operations and activities are among the most adopted by organizations recently, as companies these days focus on the optimal basic activities with the aim of maximizing the speed of response to customer requirements (Al-Hawary, 2013). In light of the increasing complexity of customer requirements, such as the diversity of products and their production according to customer specifications, and the presence of many cases that indicate disruptions in supply chains, supply chains must be able to respond to the changing market and business environment (Akın Ateş et al., 2022; Perrin & Martin, 2021). Since of the cost leadership through which an organization can gain an edge over competitors, and because new and big problems exist in opportunities in the interactions between the company and its consumers and suppliers, supply chains have become significant phenomena (Al-Nady et al., 2013). This is because supply chain management entails managing the flow of information, materials, services, and funds through any activity in a way that improves operational efficiency, as well as introducing new tools or changing or modifying existing methods, and there is no doubt that successful supply chain management will lower costs for each customer. Suppliers control risk and increase value-added and profit margins, and the organizations who manage their supply chains effectively are the most successful in their industry (Olatunji et al., 2019).

Several definitions of supply chain management have been offered by researchers and others who are interested, and an examination of these definitions reveals that they are convergent in many ways (Mardani et al., 2020; Ghadimi et al., 2019). The continuous movement of raw materials, components, information, and currency from numerous origins, through providers to the business, and lastly to the end customer in the form of goods or services is known as supply chain management (Van Goor et al., 2019). Supply chain management is defined as follows by the Council of Supply Chain Management Specialists: All planning and management processes for all operations linked to the purchase of materials and all logistical management activities, including collaboration and coordination with suppliers, brokers, other service providers, and customers, are included in supply chain management. All actions associated to the production and delivery of products or services to clients fall under this category (Ramirez-Peña et al., 2020).

Supply chain management encompasses managing supply and demand, sourcing raw materials, production, and assembly, distribution, and product delivery, according to an organization (Karim et al., 2020). According to the International Supply Chain Authority, supply chain management is the integration of an organization's main activities, from the original supplier to the final customer, that are related to providing goods, products, and information that add value to customers and other related parties (Dwivedi et al., 2020). According to Madhani (2022), supply chain relationship management entails taking proactive steps to move resources, products, and finances from suppliers through the organization's operations, and finally to the ultimate consumer.

Specific ties that are summarized in the provider's partnership, the flow of information with transparency, mutual trust, and a common vision through cooperation, partnership, and alliance strategies are all examples of these relationships (Sharma et al., 2022). Pfohl et al. (2010) believe that it is the management of relations in both directions between suppliers and customers that adds value for the customer, and he indicated that the goal is to do business at the lowest cost if the business is carried out separately, and, of course, the customer is the one who decides which supply chains provide him with the highest value at the lowest cost. Thus, responding to requests represents the secret of continuity for the company. Hence, we see that the focus of all previous definitions is on creating an advantage by maximizing the total value of goods and services (Stank et al., 1999). However, the science of supply chain management is still in its infancy.

The concept of social media has entered people's lives in various ways and affected people's operations and activities in general, and because of the length of time people spend browsing these sites, their importance has increased for organizations, so organizations have begun to think about how to take advantage of these tools to support their activities and facilitate their work, and there is no doubt that the elements and components of the supply chain based on relationships between suppliers and customers, as we mentioned previously, can benefit in this context from strengthening relationships with suppliers and customers using various social media, which enhance their capabilities and facilitate their work and may give them an advantage over others, so they become the most capable of determining customer preferences and the best able to manage their relationships with suppliers. Following the gains made by marketing operations that took advantage of social media, the notion of supply chain management arose (Al-Hawary & Obiadat, 2021).

In this context, the development of social media, with its ability to build networks of users, opens up new opportunities for creating new supply chains (Piotrowicz & Cuthbertson, 2014). Producers can use social media to better determine the social and demographic aspects of their clients, improving target group definition and tailoring marketing strategies to fit their needs (Changchit et al., 2022). Some customers' perceptions of social media as non-commercial social platforms, on the other hand, can limit its use (Creevey et al., 2022). This study takes a novel method to building online supply chains by utilizing social media. The purpose of this research is to examine customer understanding and acceptance of modern supply chains, with a focus on the usage of online social media as new instruments for improving supply chain relationship development.

In order to meet customer demands, the integration of various business processes such as demand planning, forecasting, purchasing, manufacturing, assembly, distribution, revenue management, effective and efficient flow of resources from the point of origin to the end point are important parts of the supply chain (Pratapa et al., 2022). Supply chain management practices are one of the most effective ways for companies to improve performance. It is required to improve the planning and management of operations in areas such as material planning, inventory management, production capacity planning, and logistical support services to customers in order to manage supply chain activities and improve the company's performance. For their members, supply chain procedures reflect numerous connections in which internal and external functions overlap. The importance of integration, involvement, and coordination between the participants in marketing, production, supply, sale, and shipping, which helps to generate competitive advantage, is critical to the success of this chain (Chen et al., 2022).

Li et al. (2015) identify six variables for supply chain management practices through social media: the strategic relationship with the supplier, the relationship with the customer, information sharing, information quality, internal practices, and delay. Shaharudin et al. (2019) have developed a tool for measuring supply chain conditioning and supply chain management at the level of the concepts of supply chain management practices through the systems method and indicated that it consists of dimensions such as shared vision and goals, information systems, shared risks and rewards, interoperability, process integration, relationships, and long-lasting supply chain leadership. Several previous studies indicated a set of these practices related to recruitment, strategic partnership with the supplier, information sharing, information technology sharing, active provisioning, continuous process flow, use of the internal organizational system, basic capabilities, disposal of surplus inventory, supply chain integration, management, customer service, geographical proximity, ability to produce on the spot, customer relationships, product modularity, shared vision and goals, shared risks and rewards, collaboration, process integration, and supply chain leadership (Heath et al., 2017; Li et al., 2005; Ince et al., 2013)

The goal of this research is to create a conceptual framework that defines the relationship between supply chain management techniques and competitive advantage via social media. Practices in supply chain management have been offered as a multidimensional paradigm that encompasses all connections. By providing a reliable tool for measuring supply chain management practices through social media and practical evidence on the impact of supply chain management practices through social media on the organization's competitive advantage, the current research is expected to improve understanding of the scope and activities of supply chain management. The current research is expected to provide a useful guide for measuring and implementing supply chain management practices through social media, as well as facilitate further research in this field in the future.

The researchers will address four dimensions of supply chain practices through social media that serve this study and are represented by supplier partnerships, customer relationships, and information sharing. A partnership with the supplier is defined as a long-term or permanent relationship between the organization and its suppliers, with the aim of raising the level of strategic and operational capabilities of the two parties to the relationship and achieving continuous benefits (Firdaus et al., 2021). This is done by enhancing joint coordination in many areas, such as operational processes, research and development, and production. The relationship with the customer is defined as the practices used to manage customer

complaints, build strong relationships with them, and improve their levels of satisfaction (Salem, 2021). Customer relations have been considered a major component of supply chain management practices, as they affect the success and performance of supply chain management efforts. Information sharing refers to the extent of communication and information dissemination among supply chain partners regarding market, product, and customer information. It also indicates the possibility of accessing private data between partners in order to help them follow the passage of products and orders within the various operations of the supply chain. This information may relate to logistical issues, customer requests, forecasts, schedules, markets, etc., and such information must be accurate, timely, and relevant.

2.2 Competitiveness

Competitive advantage is one of the main components of the strategy that is built and implemented in the market, as it was defined according to the scientific frameworks that were addressed through it. Some of them dealt with it from the framework of the industry analysis method, some from the framework of the market situation of the organization, and others dealt with the importance of the industry structure. A new framework has emerged through which competitive advantage has been studied, the internal dimension: internally, the organization builds competitive advantage on a number of distinctive capabilities, and those in charge of these organizations must know these capabilities well and invest competitively. In terms of the external dimension, competitive advantage is defined as the ability to interact with external actors on well-established foundations of strength, control, and stability. (Nayak et al., 2021). The term "competitiveness" is used to describe a feature's importance in terms of having conflict with external parties, such as competitors, suppliers, purchasers, and others. Competitive advantage can be divided into four categories: lowest cost, highest quality, best service, and best differentiation. According to several surveys and research, competitive advantage is based on the lowest cost and differentiation (Al-khawaldah et al., 2022; AlTaweel & Al-Hawary, 2021). Porter defines competitive advantage as the company's ability to reduce its costs or to be distinct in some aspects that the customer considers to be of great value, and that it arises as soon as the organization discovers new methods that are more effective than those used by competitors. Al-Nady et al., (2013) defined the competitive advantage as the ability of the organization to create a strong position compared to its competitors, and Al-Hawary & Al-Syasneh, (2020) believes that the competitive advantage includes the choice related to the markets in which the company will compete. The value that the business has been able to provide for its customers is what gives it a competitive advantage. As a result, it can take the shape of reduced pricing compared to rivals' prices, with equivalent advantages, or by delivering individual benefits in the product, confirming that today's competition relies on a quick response to changing market needs. Organizations are looking to find a competitive position for themselves in their industries and markets in which they operate. Therefore, they make every effort to search and explore for reasons that support their research and goal in achieving competitiveness and continuity. Perhaps one of the most prominent reasons for its competitiveness is the acceleration of its operations along the relationships in the supply chain of which it is a part. This study attempts to strengthen relationships in organizations throughout the supply chain in order to speed up and improve interactions and information sharing, allowing businesses to develop their own competitive position that ensures their survival and continuity.

2.3 Supply chain relations management through social media and competitiveness

Customer satisfaction, suitable privacy and security, cost, and competitive intensity are the top ranking CSFs for achieving supply chain social sustainability via social media, according to Orji, Kusi-Sarpong, and Gupta (2020). According to Cao, Ajjan, Hong, and Le (2018), external pressures, internal readiness, expected benefits, strategic goals, and perceived risks affect the organizational social media utilize, which in turn affects overall organizational outcomes in business and operations, and also the level of satisfaction of both externally and internally constituents such as customers, employees, partners, and suppliers. Corporate and industrial culture, working methods, technologies, and a strong regulatory environment, according to Grant (2017), can impede the formation of voluntary knowledge exchange between firms and their supply chains in this industry. Ram, & Zhang, (2021) demonstrate that social media analytics may provide competitive intelligence beyond consumers, market, and competitors, including insights into supply chains, cost, and flow of information. Furthermore, SMA-driven CI can improve demand planning and inventory management by providing visibility into supply chain uncertainties. SMA can provide intelligence about competitors' strengths and weaknesses, as well as customer dynamics. However, if SM-connected clients are not educated or kept informed, the bi-directional nature of CI could be a deciding factor. . Reddy, (2005) guarantees us that some organizations will continue to seek cost savings or profit improvements at the expense of their supply chain partners today. Companies of this type are unaware that just shifting costs upstream or downstream does not improve their competitiveness. This is because, in the end, all costs will find their way to the final market place, where they will be represented in the price paid by the end user. Leading organizations acknowledge the absurdity of this traditional strategy and instead strive to make the supply chain as a whole more competitive by adding value and lowering overall costs. Ye, Hung Lau, & Teo (2021) indicate that how supply chain management should grow throughout time is mostly determined by the context of the products. For a lean market expansion, fast-moving, high-volume items are more likely to undergo an internal-to-external, operation-led supply chain shift. Mukhtar and Azhar (2020) provide a conceptual model that can help managers construct a competitive value chain by combining value co-creation and integration to make the entire supply chain more competitive. Using social media data analytics, a business decision-making system has been proposed for the development of businesses and explains the essential principles, challenges, usefulness, and notable social data advances. BDMS also focuses on marketing and presents a practical method for extracting useful information from social data. As a result, we might speculate that:

Supply chain management through social media has a substantial impact on competitiveness.

3. Study model

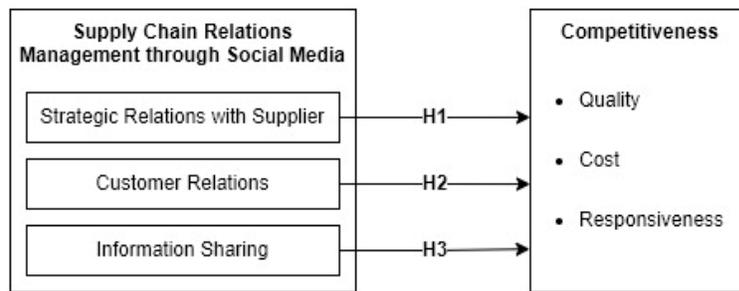


Fig. 1. Conceptual Model

4. Methodology

4.1 Research population

Jordan is famous for being the most attractive country in the Middle East for medical tourism. The Private Hospitals Association in Jordan (PHA) indicated that Jordan occupies third place in the world, with 9.3% of the GDP devoted to healthcare sectors. Furthermore, Jordan annually hosts approximately 250K patients who generate close to \$1 billion of GDP. Accordingly, managers at the senior and middle levels in private hospitals in Jordan were selected to represent the research population. Jordan has 69 private hospitals with 679 managers in various administrative disciplines. Therefore, the complete census method was used in this research to collect the primary data, where the total responses were 460. It was found that these responses included 22 responses inappropriate for statistical analysis. Therefore, 438 responses were used for analyzing the impact of supply chain management through social media on competitiveness, which represents 64.5% as a response ratio.

The frequencies and percentages of the study sample indicated that 67.5% of the respondents were males, while 32.5% of them were females. Most of the respondents were from the age group "40 - less than 50" with a percentage of 40.2%, followed by 33.5% of those who belong to the age group "30 - less than 40", then 18.6% of them were in the category "50 and over", while 7.7% only in the category "less than 30". Furthermore, it was found that 38.4% of the respondents have experience within the category "10 - less than 15", followed by 26.3% have experience in the category "15 and more", then 20.8% have practical experience in the category "5 - less than 10", and finally 14.5% have experience in the category "less than 5".

4.2 Measures

The questionnaire was used as a basic instrument in the current research, as it was designed electronically through Google Forms and sent to the research sample via email. This instrument consisted of an introduction to interpret the objectives of the research and a section that included ordinal variables that were utilized for determining demographic characteristics (gender, age, and experience). Moreover, it included a section that encompassed the main axes of the research represented by supply chain management through social media and competitiveness. The responses of these variables were measured using a five-point Likert scale, with a lower limit (1) for the response "strongly disagree" and the upper limit (5) to express the response "strongly agree".

Supply chain management through social media: it was an exogenous variable that its statement was developed according to (Firdaus et al., 2021; Salem, 2021). This latent variable was a second-order construct consisting of 15 factors distributed over three first-order constructs. Strategic relations with suppliers which were measured using five factors. Customer relations were measured through five factors. Information sharing was measured based on five factors.

Competitiveness: it was an endogenous variable that its factors were developed based on (Al-khawaldah et al., 2022; AlTaweel & Al-Hawary, 2021). This latent variable was a second-order construct consisting of 12 factors distributed over three first-order constructs. The quality was measured using four factors. The cost was measured through four factors. The responsiveness was measured by four factors.

5. Results

5.1 Measurement model

The measurement model used in the current research was evaluated through validity and reliability indicators extracted from the application of the confirmatory factor analysis (CFA) technique. Validity was determined by convergent validity and discriminant validity. Furthermore, the reliability of the measurement model was recognized using composite reliability. Table1 reported the results of the validity and reliability test for evaluating the measurement model.

Table 1
Validity and reliability tests

Variables	Items	Loadings	AVE	MSV	$\sqrt{\text{AVE}}$	CR
Strategic Relations with Suppliers (SRS)	SRS1	0.715	0.569	0.491	0.754	0.868
	SRS2	0.681				
	SRS3	0.779				
	SRS4	0.824				
	SRS5	0.764				
Customer Relations (CRE)	CRE1	0.662	0.572	0.488	0.756	0.869
	CRE2	0.759				
	CRE3	0.733				
	CRE4	0.802				
	CRE5	0.816				
Information Sharing (ISH)	ISH1	0.703	0.529	0.375	0.728	0.848
	ISH2	0.742				
	ISH3	0.683				
	ISH4	0.691				
	ISH5	0.811				
Quality (QUA)	QUA1	0.716	0.565	0.425	0.752	0.838
	QUA2	0.755				
	QUA3	0.792				
	QUA4	0.741				
Cost (COS)	COS1	0.774	0.603	0.502	0.776	0.858
	COS2	0.861				
	COS3	0.726				
	COS4	0.737				
Responsiveness (RES)	RES1	0.675	0.543	0.441	0.737	0.826
	RES2	0.826				
	RES3	0.734				
	RES4	0.705				

It was found that all factors had loadings values within the range (0.662-0.861) which are higher than 0.50, the minimum non-elimination of the factor as proposed by Brown (2015). It was also clear that the average variance extracted (AVE) exceeded 0.50 for all constructs, which proves the convergent validity of the measurement model according to Marsh et al. (2020). Moreover, Heterotrait-Monotrait ratio was used to test the discriminant validity, where the results indicated that the AVE values exceed the maximum shared variance (MSV) values, as well as the square root of average variance extracted ($\sqrt{\text{AVE}}$) surpassed the correlation coefficients between constructs, which points the integrity of the discriminant validity results (Yusoff et al., 2020). All constructs had appropriate composite reliability, as all values of McDonald's Omega coefficients were greater than 0.70, the minimum threshold for this indicator (Goodboy & Martin, 2020; Kalkbrenner, 2021). Hence, the measurement model used to examine the impact of supply chain management through social media on competitiveness had suitable validity and reliability indicators.

5.2 Descriptive analysis

Means and standard deviations were calculated to determine the respondents' attitudes towards hospital adoption of each dimension of supply chain management through social media and competitiveness. Besides, Pearson correlation coefficients were extracted to verify that dimensions of supply chain management through social media did not have multicollinearity problems. Table 2 demonstrates the results of descriptive statistics used in the current research.

Table 2
Descriptive statistics

Variables	Mean	SD	1	2	3	4	5	6
1. Strategic Relations with Suppliers	3.52	0.714	1					
2. Customer Relations	3.66	0.834	0.485	1				
3. Information Sharing	3.58	0.798	0.428	0.443	1			
4. Quality	3.64	0.802	0.625	0.592	0.615	1		
5. Cost	3.61	0.813	0.587	0.563	0.654	0.513	1	
6. Responsiveness	3.55	0.885	0.531	0.552	0.602	0.574	0.560	1

Note: all correlation coefficients are statistically significant.

The results in Table 2 reported moderate levels of the dimensions of supply chain management through social media, where customer relations (M= 3.66, SD= 0.834) ranked first, followed by information sharing (M= 3.58, SD= 0.798) in the second rank, and strategic relations with suppliers (M= 3.52, SD= 0.714) in the third and last rank. In the same context, the dimensions of competitiveness were of moderate relative importance, as quality (M= 3.64, SD= 0.802) came in the first rank, followed by cost (M= 3.61, SD= 0.813) in the second rank, and responsiveness (M= 3.55, SD= 0.885) ranked the third. Shrestha (2020) argued that the research data is free from the multicollinearity problem between the dimensions of the independent variable if the correlation coefficients between them are less than 0.80 the upper threshold. Referring to the results in Table.2, it was clear that the correlation coefficients between the dimensions of supply chain management through social media were less than the upper threshold. Consequently, the research data was free from the multicollinearity problem and the dimensions of supply chain management through social media were autonomous of each other.

5.3 Structural model

Before implementing structural analysis by AMOS software to test the research hypotheses, a concordance analysis of the variables used in the research model should be performed by checking the construct validity indicators based on the recommendations of (Guo et al., 2019; Mueller& Hancock, 2018). The construct validity results are illustrated in Fig. 2.

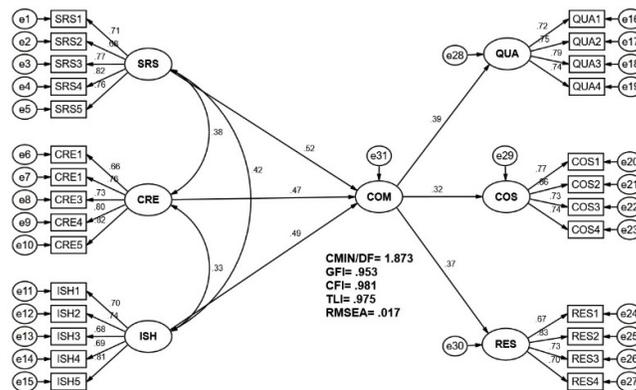


Fig. 2. Structural model for testing the research hypotheses

The results in Fig. 2 show good results for the construct validity indicators, as the chi-squared ratio (CMIN/DF) was 1.873 less than the upper limit of the critical value 3. The values of the goodness of fit index (GFI), the comparative fit index (CFI) and the Tucker-Lewis index (TLI) were acceptable because they exceeded 0.90 the common minimum threshold for these indicators. Moreover, the value of root mean square error of approximation (RMSEA) was 0.017 which is less than 0.08 the maximum fitting criterion. Therefore, the structural model of the research can be considered fit, and the results of the standardized and unstandardized impact coefficients listed in Table 3 reflect the actual reality.

Table 3

Path coefficients

Variables	B	SE	β	t-value	p-value
Strategic Relations with Suppliers → Competitiveness	0.627	0.041	0.522	15.293***	0.000
Customer Relations → Competitiveness	0.550	0.039	0.475	14.102***	0.000
Information Sharing → Competitiveness	0.583	0.040	0.491	14.575***	0.000

Note: * $p \leq 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The results in Table 3 indicate that all dimensions of supply chain management through social media had a positive impact on competitiveness. The results determined that the greatest effect was for strategic relations with suppliers ($\beta= 0.522$, $t= 15.293$, $p= 0.000$), followed by information sharing ($\beta= 0.491$, $t= 14.575$, $p= 0.000$) at the second rank, and customer relations ($\beta= 0.475$, $t= 14.102$, $p= 0.000$) at the third and last effect rank.

6. Discussions

As companies try to share information, coordinate schedules, and develop products and services jointly, social network analysis is important for managing interorganizational ties. While reduction in cost is the primary aim in every supply network, other factors must also be considered. Another source of worry is that different governance models bind interorganizational connections. Suppliers and customers are sometimes autonomous and have various market-based ties, whereas customers and suppliers are sometimes owned jointly. The findings of the study revealed that using social media to promote relationships with suppliers and consumers along the supply chain improves the competitiveness of the company. Improving and supporting supplier relationships ensures a long-term relationship with them, preventing them from dealing with competitors and giving the organization an advantage in dealing with suppliers and obtaining the necessary discounts to reduce costs and achieve the lowest cost or lowest price advantage. The findings of the study also revealed that strong, long-term relationships with suppliers enable organizations to obtain their production requirements at the right time and place, potentially putting them ahead of their competitors in terms of responding to customer demands, implying that they improve their responsiveness advantage. Similarly, the business can maintain a specific degree of product and service quality that may exceed that of competitors' services and products. The study results also showed that the use of social media to improve relations with customers in the supply chain increases the organization's capabilities in determining customer requirements accurately and, thus, the ability to meet them in a way that makes them satisfied and supports the speed of response to their requirements, which gives the organization the rapid response advantage, which increases the customers' conviction in the organization's products and services in terms of price and quality, and the customer may be willing to pay more for good relations with organizations through social media. It became clear from the study results that the use of social media along the supply chain components facilitates the process of sharing information between them. Facilitating information sharing with suppliers and customers makes information available at the right time and place to support its use in making decisions when needed, which increases confidence between supply chain parts and supports rapid decision-making and thus speed in

meeting and maintaining customers' requirements. Customer satisfaction, proper security and privacy, cost, and competitive pressure are the most ranked approaches to accomplish supply chain social sustainability via social media, according to Orji, Kusi-Sarpong, and Gupta (2020). Cao, Ajjan, Hong, and Le (2018) claim that adopting social media in organizational relations and the supply chain improves the satisfaction levels of both internal and external components including consumers, employees, partners, and suppliers. In addition, Ram and Zhang (2021) assert that social media analytics delivers competitive intelligence that extends beyond traditional customer, market, and competitor boundaries, such as insights into supply chains, costs, and information flow. Galaskiewicz (2011) pointed out that supply chain social networks affect interactions between persons within the organization as well as supply chain segments, and these results are a logical result of that.

7. Recommendations

The study sample indicated that the questioned organizations use social media to communicate throughout their supply chain, particularly in customer relations, but there are still barriers to social media use in other areas, such as partnerships and supplier connections. Managers at the examined companies should enhance their usage of social media with suppliers, according to the report, in order to support strategic connections with them. The report also suggests adopting multiple social media platforms to increase information sharing with suppliers, resulting in increased responsiveness and competitiveness for the organizations studied. This study examined the use of social media to manage relationships along the supply chain to increase competitiveness in the surveyed companies. This was a continuation and support of studies that talked about the benefits of social networks for supply chain relationships. This topic still needs further research. In future studies and research, it is possible to measure the use of social media tools in managing relationships along the supply chain and how it affects the supply chain's flexibility. Furthermore, it may be possible to measure the impact of using social media on supply chain relationships and its impact on customer retention or customer loyalty.

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