

## **The Mediating Role of Supply Chain Management between Social Media Networks and Service Quality**

**Osama Wagdi**

**School of Business, International Academy for Engineering  
and Media Science – IAEMS, Egypt**

**Ahmed Said Sayed Elrawas**

**Acting dean for college of  
management and technology,  
Arab academy for science,  
technology and maritime  
transport, smart village, Egypt**

**Sharihan Mohamed Aly**

**College of management and  
technology,  
Arab academy for science,  
technology and maritime  
transport, smart village, Egypt**

### **Abstract:**

Within the context of social media networks and quality service, this study analysed the functions that social media can play as a mediator. The business-to-business (B2B) interaction that exists between the fast-food industry in Egypt is the primary subject of this study to analyze the mediating role of supply chain management. The study covers the area of Cairo, and data collection took place during the first quarter of the year 2022. The sample size was 462, and the response rate was 84.77%. It was discovered that social media networks have an effect on the flow of information throughout the supply chain as well as the quality of services provided in fast food apps. Significant changes have been brought about in both the supply

chain and the quality of services as a result of the influence of social media. It helped explain why the supply chain's performance changed, which led to a better quality of service.

**Keywords:** Supply Chain Management; Social Media Networks; Service Quality

## 1. Introduction

The COVID-19 pandemic rapidly spread throughout the global economy. Egypt isn't an exception (Wagdi and Rabie, 2021). Fast-food sector has been hit deeply by the pandemic. The restaurants were only permitted to provide takeout (Jia, 2021). According to Yang, Liu, and Chen, X. (2020), for every one percent increase in new daily COVID-19 instances, eateries lost (0.06) percent of daily orders. This problem is a threat to the supply chain, especially from the demand side, and makes it hard for fast-food businesses to stay in business.

Supply chain management, depends on enough and relevant information and the proper use of that knowledge (Hult et al. 2003). To gather and supplement such information, an organization's sensing capability of its surroundings becomes a fundamental component of the business, allowing it to remain dynamic in its environment (Pavlou and El Sawy 2011). In general, "sensing capability" refers to the capacity to discover and develop the requirements for the transformation of an

organization's operational routines (Pavlou and El Sawy 2011; Zollo and Winter 2002).

The elements of a supply chain include all the functions that start with receiving an order to meeting the customer's request. These functions include product development, marketing, operations, distribution, finance, and customer service.

Below is an example of a very simple supply chain for a single product, where raw materials are procured from vendors, transformed into finished goods in a single step, and then transported to distribution centers, and ultimately, customers. Realistic supply chains have multiple end products with shared components, facilities and capacities. The flow of materials is not always along an arborescent network. Various modes of transportation may be considered, and the bill of materials for the end items may be both deep and large. (O'leary 2011)

Thus, the service quality in restaurants is witnessing a new dimension in service at many restaurants, which is the service of orders with delivery, so the characteristics of service quality have changed, with the delivery service and its related dimensions of service quality, which is reflected in the supply chain, Especially with delivery platforms through websites or smart phones, the quality of service goes to a new area.

When you think of social media, popular networking websites like Facebook and Twitter may be the first applications that come to mind. However, many companies are leveraging more robust social platforms to better plan and control their supply chains.

According to the eight norms that guide consumers when they go shopping, they are freedom; customization; scrutiny; integrity; collaboration; entertainment; speed and innovation. Maybe the social networking site (SNS) has a role in consumer relationship management as well as flow patterns in the supply chain.

As mentioned above, supply chain management is a very important part of the business process. There are many different links in this chain that require a lot of skill and expertise. When supply chain management is done effectively, it can lower a company's overall costs and boost profitability. If one link breaks down, it affects the rest of the chain and can be costly to a company.

According to Akundi et al. (2018), social media applications are currently being utilised to influence the information flow aspect of supply chain management. Verifiable real-time data can provide timely and insightful information about several key aspects of the supply chain of a product and enable it to adapt quickly to ever-changing market conditions.

The study examines the impact of social media on supply chain management according to the role of social media applications such as Facebook, Twitter, MySpace, LinkedIn, Whatsapp, Instagram, Google+, Pinterest, and others in human lifestyle and their reflection in institutions' and consumers' behavior, so the study expected reflection on business models in general and supply chain management in particular.

## **2. Literature Review**

There are many studies that included dimensions of the study; these studies can be classified into four groups as following:

### **2.1 Service Quality**

Cheunkamon et al. (2022) evaluated the role of service quality in the supply chain. It established a measurement approach for tourism to determine its influence on Thailand's supply chain. Numerous aspects of customer relationship management, order process management, operating management, resource management, sustainable management, and information technology management were found to influence service quality. Papalexi, et al. (2021) investigated the influence of development programmes and supply chains on pharmaceutical businesses. It found that information technology systems as a service play a significant role, as it improves the ability to supply the service, the integration of the service with the speed of responsiveness to client requests, and cost reduction.

Saurabh and Dey studied the function of information technology in agricultural technology services in 2022. The emphasis was placed on the Internet of Things (IT), networks, and cloud computing. Several variables, including pricing, compliance, trust, traceability, and mediation, were identified as influencing the decision-making process. These factors influence operational effectiveness, supply chain optimization, and sustainability. Niu (2022) created a model for a logistics supply chain using information technology, with an emphasis on the Internet of Things. It was found that the operational model of supply chains improved the quality of logistics services. This was shown by the fact that the operational model improved the chances of being environmentally sustainable.

## 2.1 Supply chain

Harland et al. (1999) indicate that the evolution of supply chain management theory is driven by rapid changes in global business practice. The worldwide recession of the late 1980s and early 1990s forced firms to re-examine, at a strategic level, the ways in which they aimed to add value and reduce costs throughout their business.

The resulting changes brought about large-scale programmes of rationalisation and organisational "down-sizing" (Kanter, 1994; Porter, 1990; Prahalad and Hamel, 1990), cost reduction drives, quality improvement initiatives, and inventory reduction programmes (Slack, 1991; Womack et al., 1990).

Since the mid-1980s, many industries have developed a more open approach towards cooperation rather than vertical integration (Porter, 1987; Thackray, 1986). The trend has been for large, vertically integrated organisations to gradually reduce the financial risk associated with operating broad business portfolios. Cooperating firms tend not to become locked in inappropriate, non-core activities and have been able to attain an increased global coverage capability (Miles and Snow, 1987). The operations management concept of "focus" (Skinner, 1969) is central in the development of this strategy.

Organizations concentrate on a limited and closely related task load, which, by the nature of its manageability, allows for the development of an increased competency level. "Non-core competencies" (Prahalad and Hamel, 1990) are classed as periphery activities, which can be outsourced to specialist organizations (Snow and Miles, 1992).

The term "supply chain management" was originally used in the early 1980s (Oliver and Webber, 1992). It referred to the management of materials across functional boundaries within an organization, but was soon extended beyond the boundary of the firm to include "upstream" production chains and "downstream" distribution channels (Womack and Jones, 1996; Womack et al., 1990). Davis (1993) defines supply chains by describing their structure and scope.

In general terms, a supply chain consists of a series of organisations and activities that are required to convert raw materials into finished products and deliver them to the final user. From a simple analytical point of view, a supply chain consists of material and information processing units with the three basic characteristics of demand, value-adding transformation, and supply.

The two-way exchange of demand and supply information between the tiers is identified as the key supply chain control mechanism, facilitating the flow of material downstream from the raw material producer to the final product. The flows of information and materials form the primary links across the supply chain system.

The strength of the entire supply chain relies on the integrity of these links. Simple illustrations often depict the supply chain as a linear construction. Brown et al. (2000) believe the chain terminology may have originated from the biological food chain concept.

The image of a causal linear "chain of events", promoted by the chain metaphor, is readily accessible but somewhat misleading. Predators within food chains consume more than one food type, and organisations within food chains interact widely with one another. If this biological comparison is continued, food chains are more accurately described as food webs.



The term "supply web" does suggest a more complex non-linear structure, described by Brown et al. (2000) as a "mess". This paper aims to explain and describe this mess within the context of the aerospace supply chain, demonstrating how the structure of the supply chain can be managed to increase its efficiency and effectiveness. Harland (1996) describes the supply chain structure as a dynamic, interconnected supply network. In practice, supply chains form a complex, interdependent network of suppliers, manufacturing facilities, and stocks linking multiple organizations, increasingly within a global market. Hewitt (2001) supports these views, explaining that various terms are now being used to describe new forms of interorganizational relationships and structures such as "value nets"; "virtual organizations"; "supply webs"; "e-networks" and "collaborative commerce networks", which all imply that knowledge of increasingly complex inter-relationships is replacing the relatively simple understanding of linear supply chain structures. The next section will discuss the development of supply chain management.

Supply Chain Management is the integration of key business processes from end-users through original suppliers that provide products, services, and information that add value for customers and other stakeholders (Croxtton et al., 2001).

SCM means information, material, and money flow coordination and integration of the network of suppliers, customers,

distributors, and manufacturers (Lee, 2000). SCM refers more to doing business electronically. SCM mainly consists of five areas. These are: strategic planning, marketing and sales, logistics, information technology, and finance (Genc, 2009). Here, the processing load of supply focuses on the logistics process. Logistics can be understood as the positioning of the resources in the supply chain within a time frame.

The supply chain cannot be properly addressed by examining separately such factors as purchasing, inventory management, functions like the logistics line or distribution channel. This kind of perception slows down the development of SCM (Lummus and Vokurka, 1999). The supply chain should not be considered as a single process; it should be regarded as a matrix of components that can be controlled by management.

The purpose of each entity in the supply chain is to forward the new information to the chain members and thus provide the perfect balance of supply and demand (Karasu, 2006). Certainly, every business aims first to increase its profits. But the philosophy of supply chain objectives is to increase the value of all the chain members so that, ultimately, the customer will benefit (Frazelle, 2002).

A good decision is based on timely, accurate, relevant, and full information. This simple formula, unfortunately, is not very easy to

apply. Obtaining the desired quality and quantity of information is one of the most complex problems facing the decision-maker. Beyond a good software and system set up, SCM needs personnel with the ability to communicate and establish good relations with suppliers. To be successful in different areas of knowledge, it is necessary to utilise SCM (Ozturen, 2008).

Information is the connection between all of the activities and operations in a supply chain (Hugos, 2006). Without information integration, few gains can be made in overall supply chain integration (Lee, 2000). Information technology advancements that allow information systems in SCM 139 to share demand information throughout the entire inventory chain can reduce costs by 2.2 to 12.1 percent (Cachon and Fisher, 2000).

In the hospitality sector, the elements of management ISs can be grouped as form, human, information technology, and application procedures. When we think of ISs, information technology usually comes to mind. However, the use of ISs is for people who are the decision-makers.

The human element is far more important for businesses such as hospitality, which give priority to the quality of service. The human element is the most important factor in ensuring the continuity and success of an IS. Besides accommodation

management expertise, the human element must be able to work as a group and be willing to share information.

Policies regulating the operation of supply chain processes, standards, resolutions, contracts, performance measures, organisational charts, job descriptions, business contacts, information flow charts, and similar documents with an explanation of the data collection and reporting tools and forms of information, are the tools to be considered within the scope of the procedures. Thanks to such procedures, the formation of a standard and reliable business model has been provided to different kinds of people. Thus, an efficient and effective work environment and controlled processes are simulated.

There are many topics in studies related to supply chains, such as supply chain management practises and their sustainability. (Chin et al., 2015; Marshall et al., 2015; Suryanto et al., 2018; Hong et al., 2018; Mathivathanan et al., 2018; Morais and Silvestre, 2018; Tseng, et al., 2019) Supply Chain Risk (Tummala and Schoenherr, 2011; Jüttner et al., 2003; Aqlan and Lam, 2015), the SC has wide spread use in Egyptian companies, but the level of use of multidimensional indicators is significantly lower.

The growing demand for supply chains to improve social standards, along with strong pressures to avoid commercial and reputational damage, places social sustainability at the centre of

the supply chain management debate. As a result, supply chain management has emerged as an important potential lens to consider how social sustainability can be addressed to achieve sustainability goals (Ashby et al., 2012).

While studies of supply chain management have started to address the concept of sustainability from economic and environmental standpoints, the social aspect remains an under-explored area (Mani et al., 2016a, 2016b). Supply chain management scholars have only recently started to show an interest in addressing social sustainability. For example, Klassen and Vereecke (2012), using data from five European multinational buyers, examined how collaborations across the supply chain could lead to social improvements. Klassen and Vereecke (2012) highlighted how commitment on the part of the larger buying firm to provide financial incentives, training, and development to suppliers could facilitate suppliers' adoption of social sustainability measures. Literature reviews on social sustainability and supply chain management have hitherto had a very narrow scope.

For supply chains, the consequences of failure in social sustainability can be disastrous and impact human life and workers' welfare (e.g., Rana Plaza). Failure can result in consumer suspicion, which can manifest as reduced consumption or a boycott (Grappi et al., 2013; Klein et al., 2004). High-profile

cases may harm a firm's reputation, and hence, financial reparations may be incurred. For example, in 2003, Nike donated \$1.5 million to the Fair Labor Association following court proceedings related to protecting the human rights of its workforce (Russell et al., 2016). Yet there has been limited examination of how institutional pressures are exerted on supply chain actors to propagate the new and emerging form of social sustainability governance: social sustainability assessment.

Institutional theory provides a suitable frame to investigate interactions between stakeholders and companies (Morali and Searcy, 2013). Under each of the three pressures, several manifestations are discussed and empirically examined in previous sustainable SCM research; however, this is predominantly from the viewpoint of the pressure recipients and focused on environmental sustainability (Zhu and Sarkis, 2007; Wu et al., 2012; Zhu et al., 2013; Glover et al., 2014). We know how companies react to institutional pressures, i.e., under which contexts they lead to the adoption of environmental practices, but the practises themselves are less clear.

According to Lambert (2008), the key supply chain processes are customer relationship management, customer service management, demand management style, order fulfillment, manufacturing flow management, supplier relationship management, product development and commercialization, and

returns management. Successful organisations determine mutually satisfying goals for the organisation and its customers, establish and maintain customer rapport, and produce positive feelings within the organisation and its customers.

Information technology in the supply chain basis of the SCM approach lies in information and communication technologies. Information and communication technology are good solutions to problems arising from the complexity of buyer-supplier and supplier-supplier systems and SCM (Gunasekaran and Ngai, 2004). Information technology is a globally competitive tool for data collection, data processing, through a process of knowledge conversion, information storage, and information transmission to users, when required.

Information technology includes computer-based IS hardware, software, communications, and all the interface elements. For healthy management of this process, information technology should be compatible among members of the supply chain; procedures should be determined with each other.

In the supply chain processes, information technologies such as radio frequency identification (RFID), electronic data interchange (EDI), and barcodes are being used. RFID is the common name for technologies used to identify objects with

radio waves. A large part of supply chain applications can be traced with RFID technology.

The use of barcode and data matrix systems provides convenience in warehouse management systems. The results of a survey show that in supply chain and logistics processes, the use of RFID technology is still low despite the widespread use of EDI and enterprise resource planning (ERP) systems (Olorunniwo and Li, 2010). EDI is the transfer of business data from a standard computer to the other partner's computer application. Most importantly, EDI imposes a one-to-many architecture for communications between supply chain members (Kahl and Berquist, 2000). For EDI, it is necessary to have EDI standards, the conversion software, and the ability to communicate (Genc, 2009). EDI permits the electronic exchange of inventory information, purchase orders, invoices, and funds transfers to settle accounts (Tesone, 2006). Most importantly, EDI imposes a one-to-many architecture for communications between supply chain members (Kahl and Berquist, 2000).

The development of management The internet has created the opportunity for global networking via the internet, intranets, and extranets. The internet makes it largely possible to share information among companies. Naturally, supply chain applications become web-based applications.



An enterprise system, also known as an ERP system, is a software system that integrates activities such as finance, accounting, human resources, customer demand, supply, production, marketing, sales, and distribution and allows the flow of information. General support and continuity of the business processes such as SCM, order management, and payment transactions.

ERP systems give companies the flexibility to respond rapidly to customer requests while producing and stocking inventory only with what is needed to fulfil existing orders. Their ability to increase accurate and on-time shipments, minimise costs, and increase customer satisfaction adds to the firm's profitability (Laudon and Laudon, 2009). As described previously, SCM systems help businesses manage relationships with their suppliers.

CRM systems help firms manage their relationships with customers. CRM systems provide information to coordinate all the business processes that deal with customers in sales, marketing, and service to optimise revenue, customer satisfaction, and customer retention (Laudon and Laudon, 2009). KMS enables organisations to better manage processes for capturing and applying knowledge and expertise. These systems collect all relevant knowledge and experience in the firm and make it available wherever and whenever it is needed to improve business processes and management decisions (Laudon and Laudon, 2009). The members of the supply chain (supplier,

manufacturer, distributor, customer) and those operating in the sub-units (department, section, individuals) must be in contact with each other. This information allows members of the supply chain network to act as a single enterprise.

This increases the importance of building a full-time IS. Information on the supply network is common knowledge to all members of the supply chain and can be accessed at any time. Information sharing on the basis of SCM, supply chain, and the chain of communication between departments within an enterprise with members of their own communications network is extremely important in terms of supply chain efficiency.

### **2.3 Social Media and Business Types**

Social media refers to a group of internet-based applications that allow the creation and exchange of user-generated content in real time (Brooks, 2015; Kaplan and Haenlein, 2010). Examples include popular platforms like Facebook, Flickr, Twitter, and the lesser known but widely used WeChat, Sina Weibo, and Tencent QQ in China. Originally designed for individuals to connect with friends and relatives, the use of social media as a coordination and communication tool has spread rapidly in the business domain (Kane et al., 2010; Leonardi, 2014; Roth et al., 2016).

A recent survey reveals that 77 percent of small businesses (Dougert, 2018) and 85 percent of Fortune 500 companies (Cohen, 2017) in the USA use social media to facilitate business functions.

There are many topics in studies related to social media and customers. These studies can be classified into two groups. First, consider the use of social media in business (Brennan and Croft, 2012; Agnihotri et al., 2016; Lacka and Chong, 2016; Barry and Girona, 2017). Second, social media with B2C (Constantinides et al., 2015; Bowen et al., 2015; Davidaviciene et al., 2017); and finally, Iankova et al. (2019) that B2B social media usage differs from B2C, mixed, and B2B2C business models. B2B organisational members perceive social media to have lower overall effectiveness as a channel and identify it as less important for relationship-oriented usage than other business models.

According to Jussila et al. (2014), it is a fairly common argument in business-to-business companies, especially in traditional industrial companies, that social media is only useful in the business-to-consumer sector. The perceived challenges, opportunities, and social media use cases in the business-to-business sector have received little attention in the literature. There is a significant gap between the perceived potential of social media and social media use with customers and partners in business-to-business companies, and this study identifies potentially effective ways to reduce the gap.

According to Iankova et al. (2019), B2B social media usage is distinct from B2C, mixed, and B2B2C business model approaches. Specifically, B2B organisational members perceive social media to have lower overall effectiveness as a channel and identify it as less important for relationship-oriented usage than other business models.

According to Almazrouei et al. (2020), social media encompasses an array of tools and knowledge that significantly influence the competence of businesses through increased sales and performance. Primarily, social media acts as a platform that enhances the improvement of business operations, mainly because of the intensified global connectivity. In this case, businesspeople acquire dynamic capabilities through various social media tools. These capabilities include advanced brand awareness and loyalty; innovative insights; product diversification; and an international business network. The main objective of the research model entails uncovering the relationship between social media and businesses.

Businesses collect information about their competence level through various capability entities and social media. These are referred to as strategic business points, which companies use to create competent marketing responses. The various capability entities encompass brand awareness, brand loyalty, product innovation, product diversification, and global business

networks. Insights from these entities can be used to increase the quality of business operations, such as the process of developing products and delivering services. Businesses can also use this information to customise their products and services to fit individual tastes and preferences. Effective business strategies contribute to the enhancement of business operations and competence through the information gathered from the various social media platforms. With this research, businesses will get equipped with knowledge of how to effectively use social media through the acquired dynamic capabilities to improve sales and marketing activities, which eventually lead to an increase in sales. (Almazrouei et al., 2020).

So, social media is a multifaceted phenomenon that profoundly influences the level of business competence, mainly because of the enhancement of its capabilities. In most cases, social media plays the supporting role of an interactive platform and a source of knowledge. The intensification of connectivity creates a niche market for businesses to exploit through the sufficient flow of information. As a result, enterprises acquire dynamic capabilities to use in gaining a competitive position in the niche market. Therefore, social media is a platform that significantly influences businesses through the enhancement of competence. (Almazrouei et al., 2020).

Finally, digital transformation of businesses cannot improve relationship performance on its own; it must be combined with smart

technologies to achieve this goal. This means that smart technologies fully mediate the relationship between digital transformation and relationship performance. (Nasiri et al., 2020).

## **2.4 Service Quality, Social Media and Supply Chain**

Recently, industrial and academic communities in the operations and supply chain management (OSCM) field are paying increasing attention to social media. However, the value of social media in OSCM is quite unclear, and more investigations are still needed. Over the last decade, research interest in this area has grown dramatically across industries and regions. Different companies' OSCM activities, such as sourcing and delivery, can benefit from the employment of social media. (Huang et al., 2020).

Several technologies drive digital trends and bring about change in SCM. They include AI and robotics, cloud computing, 3D printing, advanced analytics, blockchain, AR, RFID, IoT, and cloud technology. These technologies are changing the face of the industry, transforming many aspects of business models, supply chains, products, sales, and services. The importance of these technologies for supply chains and logistics (Attaran, 2020).

According to Paniagua and Sapena (2014), the social media space has become a common place for communication,

networking, and content sharing. Many companies seek marketing and business opportunities via these platforms. However, the link between resources generated from these sites and business performance remains largely unexploited. Both managers and financial advisors can profit from the lessons learned in this study. We conceptualise four channels through which social media impacts financial, operational, and corporate social performance: social capital; customers' revealed preferences; social marketing; and social corporate networking. The framework shows that "followers" and "likes" positively influence a firm's share value, but only after a critical mass of followers is attained. Our estimates suggest that Twitter is a more powerful tool to enhance business performance than Facebook.

According to McCann and Barlow (2015), SMEs find some social media applications more valuable than others, but 65 per cent of the companies did not measure the ROI. An overarching framework, aimed at SMEs, is presented, which advocates that SMEs should take a strategic focus and plan their use of social media, and draw insight from both quantitative and qualitative data when measuring ROI.

According to Choi (2018), the fashion quick response programme includes social media observations, demand forecast updating, and a boundedly rational retailer. Choi and Choi find that the likelihood of having good social media comments on the

product plays a critical role in affecting the value of quick response, and its impact is mediated by the fashion retailer's prior attitude towards the market demand. We then demonstrate how a Pareto-improving situation can be achieved under quick response, and uncover that manipulating social media comments can benefit the manufacturer under the surplus sharing contract but not under the two-part tariff contract.

In other sectors, Singh et al. (2018) propose a big-data analytics-based approach that considers social media (Twitter) data for the identification of supply chain management issues in food industries. In particular, the proposed approach includes text analysis using a support vector machine (SVM) and hierarchical clustering with multiscale bootstrap resampling. The result of this approach included a cluster of words which could inform supply-chain (SC) decision makers about customer feedback and issues in the flow or quality of food products. A case study in the beef supply chain was analysed using the proposed approach, where three weeks of data from Twitter were used.

But Akundi et al. (2018) have a study where information is gathered from Twitter to understand how the tweets about a given smartphone can influence its supply chain and its management. Based on relevant hashtags and keywords found in the latest news about three different smartphone brands (i.e., Apple, Samsung, and Huawei), data mining is used to extract and analyse the tweets with the specific



hashtags or keywords from Twitter. To reduce the loss of a significant amount of event-related information due to Twitter's API data access restrictions, the concept of refined hashtags and keywords is also used to enhance the Twitter crawling model. Sentiment analysis and opinion analysis were carried out based on the refined hashtags with the goal of analysing people's emotions towards a specific smartphone brand and predicting its influence on aspects of the supply chain to enable real-time adjustments to ensure a robust supply chain model. This effort enabled the identification of a new model of smartphone supply chain management with built-in social media information flow. According to Orji et al. (2020), customer satisfaction, sufficient security and privacy, affordability, and competitive pressure are the highest ranked CSFs to achieve supply chain social sustainability using social media.

### **3. Methodology of the Study**

#### **3.1 Data Analysis:**

The study used an analytical-descriptive approach to develop a hypothesis and a theoretical framework for investigating the impact of social media on the supply chain. So, it uses the case study method on social media tools (Facebook, Twitter, and Instagram) in the fast food industry.

The study uses parametric tests to obtain statistical inferences for the hypotheses. The procedures employed for testing statistical causality between social media and supply chain and quality services are described in the descriptive statistics and the

correlation coefficients and multiple-regression models.

### 3.2 Study Limitations

The study focuses on the fast-food industry in Egypt that has a business-to-business (B2B) relationship. It covers the area of Cairo and data collection during the 1<sup>st</sup> quarter of 2022. With a focus on fast-food corporations.

### 3.3 Data collection

The current study analyses the impact of social media on supply chain and quality service management in the fast food industry in Cairo, Egypt. It conducted interviews with the firm's managers for the first stage of the study. In the second one, a questionnaire has been used. 545 forms were sent to managers and staff, but only 462 were received, with a response rate of 84.77%. Table (1) summarises the number of participants in the survey.

**Table 1. Survey participants**

No.	region	Number	Weight
1	Downtown	97	20.99%
2	Zamalek	71	15.37%
3	New Cairo	55	11.91%
4	6th of October	50	10.82%
5	Heliopolis (Masr Al Jadidah)	92	19.91%
6	Maadi	41	8.87%
7	mohandessin	56	12.12%
<b>Total</b>		462	100%

## **4. statistical analysis**

### **4.1 Reliability statistics**

The Cronbach's alpha coefficient of the received questionnaires was 0.9645. Thus, the study found indicators of stability in the statistical tests' results. The following table shows the correlation coefficients between the statements in the questionnaire form.

**Table 2. Correlation Coefficients**

	X1	X2	X3	Y1	Y2	Y3	Y4
X1	1	0.9593**	0.9767**	0.8097**	0.7355**	0.865**	0.8926**
X2		1	0.936**	0.81869**	0.8576**	0.802**	0.8336**
X3			1	0.7892**	0.72009**	0.8519**	0.8757**
Y1				1	0.662**	0.616**	0.668**
Y2					1	0.6147**	0.6318**
Y3						1	0.8784**
Y4							1

\*\*Correlation is significant at the 0.01 level (2-tailed).

**Source: Statistical Package for the Social Sciences output**

Table 2 shows that the correlation coefficients indicate the presence of two patterns between the questionnaire form statements: either a positive or negative relationship.

### **4.2 Descriptive statistics for using social media in business**

The statements from (1) to (3) made up the first part of the questionnaire. This part was about how people felt about using

social media for business. The table below shows descriptive statistics about how people use social media in the fast-food industry in Egypt.

**Table 3. Descriptive statistics of using social media in fast-food sector in Egypt**

No.	Statement	Mean	Std. deviation	Coefficient of variation
1	There is an interest in using social media in our business	4.279221	1.061024	0.247948
2	One of our business mechanisms is social media	4.383117	1.077464	0.245821
3	Social media is an aspect of some staff's job duties	4.296537	1.033469	0.240535
D1	using social media in business	4.313853	1.056767	0.24497

**Source: Statistical Package for the Social Sciences output**

### **4.3 Descriptive statistics for the impact of social media on supply chain and quality services management**

The statements from (4) to (8), which were the questionnaire's second dimension; the (D2) was attitudes toward the impact of social media on supply chain management and quality services; the following table presents descriptive statistics for this impact in Egypt.

**Table 4. Descriptive statistics of the impact of social media on supply chain management and quality services**

No.	Statement	Mean	Std. deviation	Coefficient of variation
4	There is an increase in the flow of information as a result of using social media	3.720779	0.984677	0.264643
5	There is an increase in the demand for the product as a result of using social media	3.506494	1.021972	0.291451
6	There is an increase in revenue as a result of using social media	3.52381	1.099436	0.312002
7	There is an improvement in financial performance as a result of using social media	3.428571	1.000155	0.291712
8	There is a decrease in the risks as a result of using social media	1.008658	0.092745	0.091949
D2	<b>the impact of social media on supply chain and quality services management</b>	3.074	0.70523	0.22938

**Source: Statistical Package for the Social Sciences output**

**4.4 Examining the impact of social media on supply chain and quality services performance and quality services in fast-food applications**

After processing the data within the Statistical Package for the Social Sciences (SPSS), the following outputs appear:

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896 <sup>a</sup>	.804	.802	.4446

a. Predictors: (Constant), X3, X2, X1

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	370.602	3	123.534	624.896	.000 <sup>a</sup>
	Residual	90.541	458	.198		
	Total	461.143	461			

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y4

**Source: Statistical Package for the Social Sciences output**

**Figure 1. Output of test Hypothesis No.1**

The previous statistical results show (F) was 624.896, which is significant at the level of 1%, so Figure (1) show a significant the impact of social media on of social media on supply chain and quality service performance.

*Now, the study rejects the Null hypothesis and accepts the following alternative hypothesis*

*H<sub>1</sub>: There is statistical impact of social media on supply chain and quality service performance in Fast-food applications.*

#### **4.5 Examining the impact of social media on Information flows in supply chain and quality services in Fast-food applications.**

After processing the data, within Statistical Package for the Social Sciences (SPSS) the following outputs appear

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.823 <sup>a</sup>	.678	.676	.5608

a. Predictors: (Constant), X3, X2, X1

ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	302.944	3	100.981	321.094	.000 <sup>a</sup>
	Residual	144.037	458	.314		
	Total	446.981	461			

a. Predictors: (C onstant), X3, X2, X1

b. Dependent Variable: Y1

**Source: Statistical Package for the Social Sciences output**

**Figure 2. Output of test Hypothesis No.2**

The previous statistical results show (F) was 321.094, which is significant at the level of 1%, so Figure (2) shows a significant impact of social media on information flows in supply chains and quality services.

*Now, the study rejects the Null hypothesis and accepts the following alternative hypothesis*

*H2: Social media has a statistical impact on information flows in the supply chain and quality services in fast-food applications.*

**4.6 Examining the impact of social media on product flows in supply chain and quality services in Fast-food applications.**

After processing the data, within Statistical Package for the Social Sciences (SPSS) the following outputs appear

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912 <sup>a</sup>	.831	.830	.4212

a. Predictors: (Constant), X3, X2, X1

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	400.213	3	133.404	751.830	.000 <sup>a</sup>
	Residual	81.267	458	.177		
	Total	481.481	461			

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y2

**Source: Statistical Package for the Social Sciences output**

**Figure 3. Output of test Hypothesis No.3**

The previous statistical results show (F) was 751.83, which is significant at the level of 1%, so Figure (3) shows a significant impact of social media on product flows in supply chain and quality services.

*Now, the study rejects the Null hypothesis and accepts the following alternative hypothesis:*

*H<sub>3</sub>: There is a statistical impact of social media on product flows in the supply chain and quality services in fast-food applications.*



#### **4. 7 Examining the impact of social media on fund flows in supply chain and quality services in Fast-food applications**

After processing the data, within the Statistical Package for the Social Sciences (SPSS), the following outputs appear.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.872 <sup>a</sup>	.760	.758	.5409

a. Predictors: (Constant), X3, X2, X1

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	423.235	3	141.078	482.182	.000 <sup>a</sup>
	Residual	134.003	458	.293		
	Total	557.238	461			

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y3

**Source: Statistical Package for the Social Sciences output**

**Figure 4. Output of test Hypothesis No.4**

The previous statistical results show (F) was 482.182, which is significant at the level of 1%, so Figure (8) shows a significant impact of social media on fund flows in supply chain and quality services.

*Now, the study rejects the Null hypothesis and accepts the following alternative hypothesis:*

*H<sub>4</sub>: There is statistical impact of social media on fund flows in the supply chain and quality services in fast-food applications.*

## **4.8 Findings and Discussion**

There are many topics in studies related to Social Media and Customer; These studies can be classified into two groups. First: Social Media with B2B (Brennan and Croft, 2012; Agnihotri et. al., 2016; Lacka and Chong, 2016; Barry and Gironda, 2017). Second Social Media with B2C (Constantinides et. al., 2015; Bowen et. al., 2015; Davidaviciene et. al., 2017); finally; Iankova et. al. (2019) that B2B social media usage is distinct from B2C, Mixed and B2B2C business model approaches. Specifically B2B organizational members perceive social media to have a lower overall effectiveness as a channel and identify it as less important for relationship oriented usage than other business models.

Inferential tests indicate that there is an impact of social media on supply chain and quality service management in Egyptian firms. This aligns with literature for both supply chain and quality services as well as social media. Over the last decade, research interest in this area has grown dramatically across industries and regions. Different companies' supply chain and quality service management activities, such as sourcing and delivery, can benefit from the employment of social media. (Huang et al., 2020);

where social media changes the characteristics of different flows in the supply chain and the quality of services by providing a new avenue for interaction between the final consumer and other parties, thereby increasing the efficiency of information and the speed with which both parties communicate.

## **5. Conclusion and Recommendations**

### **5.1 Conclusion**

5.1.1 There is an interaction between credibility, social relationships, and entertainment on social media and this is reflected in the functioning of supply chains and service quality. This is evidenced by the influence of word of mouth, company reputation, and consumer characteristics. Most respondents chose Facebook as their most frequently used social network. Therefore, it is suggested that further research should be conducted to determine whether there is a difference in attitudinal effectiveness between various social networking sites such as YouTube, Google+, LinkedIn, and Twitter, as well as traditional media.

5.1.2 Social networks are working to bring about changes in the nature of business activities; these changes included new methods of product promotion, to distribute products, whether goods or services alike, instead of providing new methods to explore customer opinions in addition to supply-chain and quality services intermediaries.

5.1.3 There is an impact of social media on information flows in the supply chain and quality services in fast-food applications. At a rate of 67.8%, the use of social media helped explain how information flows have changed.

5.1.4 There is an impact of social media on product flows in the supply chain and quality services in fast-food applications. The use of social media contributed to explaining the change in product flows at a rate of 83.1%.

5.1.5 There is an impact of social media on fund flows in the supply chain and quality services in fast-food applications. The use of social media contributed to explaining the change in fund flows at a rate of 76.1%.

## **5.2 Recommendations**

5.2.1 Humans are social creatures by nature, so the influence of friends, colleagues, and/or partners in social networks (Facebook, YouTube, Google+, LinkedIn, and Twitter) should be heavily considered and emphasized. Firms should examine and analyse their consumers' profiles carefully and accurately to emphasise the desire for possession and acquisition of a product or brand.

5.2.2 Operations managers must develop the design and transaction of supply chain and quality services, whether for goods or services, to adapt to contemporary environmental variables under the increasing use of social networks

(Facebook, YouTube, Google+, LinkedIn, and Twitter) by many users, whether for goods or services alike.

5.2.3 Managers and marketers should consider advertising their product/brand on social networks besides traditional media tools. Accordingly, they should allocate a considerable part of their promotional budget to social networking sites (Facebook, YouTube, Google+, LinkedIn, and Twitter) ads.

5.2.4 Marketers should give significant attention to the entertaining aspect of the ad. The more entertaining the ad is, the more likely it will stimulate the consumers to continue watching it without clicking the "skip ad" button. In addition, practitioners should provide social networking (Facebook, YouTube, Google+, LinkedIn, and Twitter) users with informative, rich, relevant, and up-to-date ads in order to obtain a favourable attitude towards their product/brand. Yet, information without entertainment is useless.

5.2.5 Firms need to use social networks (Facebook, YouTube, Google+, LinkedIn, and Twitter) in their work and focus their efforts on increasing the effectiveness of their content on these networks; create a business unit responsible for monitoring and developing and updating their content on social networks, and follow up on customer feedback on content, which contributes to rapid response.

5.2.6 Prevention of rumours via the use of many methods, including marketing intelligence, marketing research, and measuring the attitude and satisfaction of customers. In addition to closely following social networks (Facebook, YouTube, Google+, LinkedIn, and Twitter), the immediate reaction to the news published about the firm

5.2.7 Future research could also undertake comparative studies between other countries, since developed countries might differ from developing ones. In addition, further investigation could be conducted to compare attitudes and intentions across genders and different types of good or service.

## References

- Agnihotri, R., Dingus, R., Hu, M. Y., & Krush, M. T. (2016). Social media: Influencing customer satisfaction in B2B sales. *Industrial Marketing Management*, 53, 172-180.
- Akundi, A., Tseng, B., Wu, J., Smith, E., Subbalakshmi, M., & Aguirre, F. (2018). Text Mining to Understand the Influence of Social Media Applications on Smartphone Supply chain and quality services. *Procedia Computer Science*, 140, 87-94.
- Almazrouei, F. A., Alshurideh, M., Al Kurdi, B., & Salloum, S. A. (2020, October). Social Media Impact on Business: A Systematic Review. In *International Conference on Advanced Intelligent Systems and Informatics* (pp. 697-707). Springer, Cham.
- Aqlan, F., & Lam, S. S. (2015). A fuzzy-based integrated framework for supply chain and quality services risk assessment. *International Journal of Production Economics*, 161, 54-63.
- Ashby, A., Leat, M. and Hudson-Smith, M. (2012), "Making connections: a review of supply chain and quality services management and sustainability literature", *Supply chain and quality services Management: An International Journal*, Vol. 17 No. 5, pp. 497-516.
- Attaran, M. (2020, July). Digital technology enablers and their implications for supply chain and quality services management. In *Supply chain and quality services Forum: An International Journal* (Vol. 21, No. 3, pp. 158-172). Taylor & Francis.
- Barry, J. M., & Girona, J. T. (2017). Operationalizing thought leadership for online B2B marketing. *Industrial Marketing Management*, 1-22.

- Bowen, J., Baloglu, S., Kwok, L., Zhang, F., Huang, Y. K., Yu, B., ... & Rangan, K. (2015). Documenting business-to-consumer (B2C) communications on Facebook. *Worldwide Hospitality and Tourism Themes*.
- Brennan, R., & Croft, R. (2012). The use of social media in B2B marketing and branding: An exploratory study. *Journal of Customer Behaviour*, 11(2), 101-115.
- Brooks, S. (2015), "Does personal social media usage affect efficiency and well-being?", *Computers in Human Behavior*, Vol. 46 No. 2015, pp. 26-37.
- Brown, S., Lamming, R., Bessant, J. and Jones, P. (2000), *Strategic Operations Management*, Butterworth Heinemann, Oxford.
- Cachon, G.P. and Fisher, M. (2000), "Supply chain and quality services inventory management and the value of shared information", *Management Science*, Vol. 46 No. 8, pp. 1032-48.
- Cheunkamon, E., Jomnonkwao, S., & Ratanavaraha, V. (2022). Measurement model of service quality of tourism supply chain and quality services in Thailand. *Anatolia*, 1-14.
- Chin, T. A., Tat, H. H., & Sulaiman, Z. (2015). Green supply chain and quality services management, environmental collaboration and sustainability performance. *Procedia Cirp*, 26, 695-699.
- Choi, T. M. (2018). Incorporating social media observations and bounded rationality into fashion quick response supply chain and quality services in the big data era. *Transportation Research Part E: Logistics and Transportation Review*, 114, 386-397.



- Cohen, H. (2017), "Fortune 500 Business social media use: what your peers are doing", November 7, available at: <https://heidicohen.com/fortune-500-business-social-media-use-research/> (accessed October 15, 2019).
- Constantinides, E., Schepers, L., & Vries, S. D. (2015). B2C social media value gap-model: a study of the Dutch online retailing. *International journal of electronic marketing and retailing*, 6(3), 179-193.
- Croxton, K.L., Garcia-Dastugue, S.J., Lambert, D.M. and Rogers, D.S. (2001), "The supply chain and quality services management processes", *The International Journal of Logistics Management*, Vol. 12 No. 2, pp. 13-36.
- Davidaviciene, V., Pabedinskaite, A., & Davidavicius, S. (2017). Social Networks in B2B and B2C Communication. *Transformations in Business & Economics*, 16(1).
- Davis, T. (1993). Effective supply chain management. *Sloan management review*, 34, 35-35.
- Dougert, B. (2018). 77 Percent of US small businesses use social media for sales, marketing and customer service. Available, 30(08).
- Frazelle, E. (2002). *Supply chain and quality services strategy: the logistics of supply chain and quality services management*. McGraw Hill.
- Genc, R. (2009), *Lojistik ve Tedarik Zinciri Yo`netiminin Yo`ntem ve Kavramları*, Detay Yayıncılık, Ankara.
- Glover, J. L., Champion, D., Daniels, K. J., & Dainty, A. J. (2014). An Institutional Theory perspective on sustainable practices across the dairy supply chain and quality services. *International Journal of Production Economics*, 152, 102-111.

- Grappi, S., Romani, S. and Bagozzi, R.P. (2013), "Consumer response to corporate irresponsible behaviour: moral emotions and virtues", *Journal of Business Research*, Vol. 66 No. 10, pp. 1029-1042.
- Gunasekaran, A. and Ngai, E.W.T. (2004), "Information systems in supply chain and quality services integration and management", *European Journal of Operational Research*, Vol. 159, pp. 269-95.
- Harland, C.M. (1996), "Supply chain and quality services management relationships, chains and networks", *British Journal of Management*, Vol. 7, March, pp. S63-80.
- Harland, C.M., Lamming, R.C. and Cousins, P.D. (1999), "Developing the concept of supply strategy", *International Journal of Operations & Production Management*, Vol. 19 No. 7, pp. 650-73.
- Hewitt, F. (2001), "Why demand chain communities are replacing supply chain and quality services", *The International Journal of Logistics Management*.
- Hong, J., Zhang, Y., & Ding, M. (2018). Sustainable supply chain and quality services management practices, supply chain and quality services dynamic capabilities, and enterprise performance. *Journal of Cleaner Production*, 172, 3508-3519.
- Huang, S., Potter, A., & Evers, D. (2020). Social media in operations and supply chain and quality services management: State-of-the-Art and research directions. *International Journal of Production Research*, 58(6), 1893-1925.
- Hugos, M. (2006), *Essentials of Supply chain and quality services Management*, 2nd ed., Wiley, Hoboken, NJ.

- Hult, G.T.M., Ketchen Jr, D.J., and Nichols Jr, E.L.( 2003). Organizational Learning as a Strategic Resource in Supply Management. *Journal of Operations Management* 21(5), pp. 541-556.
- Iankova, S., Davies, I., Archer-Brown, C., Marder, B., & Yau, A. (2019). A comparison of social media marketing between B2B, B2C and mixed business models. *Industrial Marketing Management*, 81, 169-179.
- Jia, S. S. (2021). Analyzing restaurant customers' evolution of dining patterns and satisfaction during COVID-19 for sustainable business insights. *Sustainability*, 13(9), 4981.
- Jussila, J. J., Kärkkäinen, H., & Aramo-Immonen, H. (2014). Social media utilization in business-to-business relationships of technology industry firms. *Computers in Human Behavior*, 30, 606-613.
- Jüttner, U., Peck, H., & Christopher, M. (2003). Supply chain and quality services risk management: outlining an agenda for future research. *International Journal of Logistics: Research and Applications*, 6(4), 197-210.
- Kahl, S.J. and Berquist, T.P. (2000), "A primer on the internet supply chain and quality services", *Supply chain and quality services Management Review*, September/October, pp. 40-8.
- Kane, G.C., Majchrzak, A. and Ives, B. (2010), "Special issue on enterprise and industry applications of social media", *MIS Quarterly Executive*, Vol. 9 No. 4, pp. iii-iv.
- Kanter, R.M. (1994), "Collaborative advantage", *Harvard Business Review*, July-August, pp. 96-108. Miles, R. and Snow, C. (1987), "Network organisations: new concepts on new forms", *California Management Review*, Vol. 28 No. 3, pp. 62-73.

- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and lucre of social media. *Business Horizons*, 53 (1), 59-68.
- Karasu, I.F. (2006), Tedarik Zinciri Yo`netiminin Yapısı ve I'sleyisi (Yayımlanmamış, Yu` ksek Lisans Tezi), Anadolu U` niversitesi, Eskişehir.
- Klassen, R. D., & Vereecke, A. (2012). Social issues in supply chain and quality servics: Capabilities link responsibility, risk (opportunity), and performance. *International Journal of production economics*, 140(1), 103-115.
- Klein, J. G., Smith, N. C., & John, A. (2004). Why we boycott: Consumer motivations for boycott participation. *Journal of Marketing*, 68(3), 92-109.
- Lacka, E., & Chong, A. (2016). Usability perspective on social media sites' adoption in the B2B context. *Industrial Marketing Management*, 54, 80-91.
- Lambert, D. M. (2008). Supply chain and quality services management: processes, partnerships, performance. Supply chain and quality services Management Inst.
- Laudon, K.C. and Laudon, J.P. (2009), *Essentials of Management Information Systems*, 8th ed., Prentice-Hall, Upper Saddle River, NJ.
- Lee, H.L. (2000), "Creating value through supply chain and quality services integration", *Supply chain and quality services Management Review*, September/October, pp. 30-6.
- Leonardi, P.M. (2014), "Social media, knowledge sharing, and innovation: toward a theory of communication visibility", *Information Systems Research*, Vol. 25 No. 4, pp. 796-816.

- Lummus, R.R. and Vokurka, R.J. (1999), "Defining supply chain and quality services management: a historical perspective and practical guidelines", *Industrial Management & Data Systems*, Vol. 99 No. 1, pp. 11-17.
- Mani, V., Agarwal, R., Gunasekaran, A., Papadopoulos, T., Dubey, R. and Childe, S.J. (2016b), "Social sustainability in the supply chain and quality services: construct development and Management: An International Journal, Vol. 20 No. 6, pp. 697-707.
- Mani, V., Agrawal, R. and Sharma, V. (2016a), "Impediments to social sustainability adoption in the supply chain and quality services: an ISM and MICMAC analysis in Indian manufacturing industries", *Global Journal of Flexible Systems Management*, Vol. 17 No. 2, pp. 135-156.
- Marshall, D., McCarthy, L., Heavey, C., & McGrath, P. (2015). Environmental and social supply chain and quality services management sustainability practices: construct development and measurement. *Production Planning & Control*, 26(8), 673-690.
- Mathivathanan, D., Kannan, D., & Haq, A. N. (2018). Sustainable supply chain and quality services management practices in Indian automotive industry: A multi-stakeholder view. *Resources, Conservation and Recycling*, 128, 284-305.
- McCann, M., & Barlow, A. (2015). Use and measurement of social media for SMEs. *Journal of small business and enterprise development*.22(2).
- Miles, R. and Snow, C. (1987), "Network organisations: new concepts on new forms", *California Management Review*, Vol. 28 No. 3, pp. 62-73.
- Morais, D. O., & Silvestre, B. S. (2018). Advancing social sustainability in supply chain and quality services management: Lessons from multiple

- case studies in an emerging economy. *Journal of cleaner production*, 199, 222-235.
- Morali, O. and Searcy, C. (2013), "A review of sustainable supply chain and quality services practices in Canada", *Journal of Business Ethics*, 117 (3). 636-658.
- Nasiri, M., Ukko, J., Saunila, M., & Rantala, T. (2020). Managing the digital supply chain and quality services: The role of smart technologies. *Technovation*, 96, 102121.
- Niu, B., Dai, Z., Liu, Y., & Jin, Y. (2022). The role of Physical Internet in building trackable and sustainable logistics service supply chain and quality services: A game analysis. *International Journal of Production Economics*, 247, 108438.
- O'leary, D.E. (2011). The Use of Social Media in the Supply chain and quality services: Survey and Extensions. *Intelligent Systems in Accounting, Finance and Management* 18 (2-3), pp. 121-144.
- Oliver, R.K. and Webber, M.D. (1992), "Supply chain and quality services management; logistics catches up with strategy", in Christopher, M.G. (Ed.), *Logistics: The Strategic Issues*, Chapman & Hall, London, pp. 63-75.
- Olorunniwo, F.O. and Li, X. (2010), "Information sharing and collaboration practices in reverse logistics", *Supply chain and quality services Management: An International Journal*, Vol. 15 No. 6, pp. 454-62.
- Orji, I. J., Kusi-Sarpong, S., & Gupta, H. (2020). The critical success factors of using social media for supply chain and quality services social sustainability in the freight logistics industry. *International Journal of Production Research*, 58(5), 1522-1539.

- Ozturen, A. (2008), KKTC Turizm Sekto'ru' nde Bu'tu' nles,ik Tedarik Zincirinin Konaklama I's,letmelerinin Performansına Etkisi (Yaymlanmamıs, Doktora Tezi), Anadolu U'niversitesi, Eskis,ehir.
- Paniagua, J., & Sapena, J. (2014). Business performance and social media: Love or hate?. *Business horizons*, 57(6), 719-728.
- Papalexi, M., Bamford, D., Nikitas, A., Breen, L., & Tipi, N. (2021). Pharmaceutical supply chain and quality services and management innovation?. *Supply chain and quality services Management: An International Journal*.
- Pavlou, P.A., and El Sawy, O.A. (2011). Understanding the Elusive Black Box of Dynamic Capabilities. *Decision Sciences* .42(1), pp. 239-273.
- Porter, M.E. (1987), "Managing value: from competitive advantage to corporate strategy", *Harvard Business Review*, May-June.
- Porter, M.E. (1990), *Competitive Advantage of Nations*, Macmillan Press, London.
- Prahalad, C.K. and Hamel, G. (1990), "The core competence of the corporation", *Harvard Business Review*, May-June, pp. 79-92.
- Roth, P.L., Bobko, P., Iddekinge, C. H. V. and Thatcher, J. B. (2016), "Social media in employee-selection related decisions: a research agenda for uncharted territory", *Journal of Management*, Vol. 42 No. 1, pp. 269-298.
- Russell, C., Russell, D. and Honea, H. (2016), "Corporate social responsibility failures: how do consumers respond to corporate violations of implied social contracts?", *Journal of Business Ethics*, 136 (4), 759-773.
- Singh, A., Shukla, N., & Mishra, N. (2018). Social media data analytics to improve supply chain and quality services management in food

- industries. *Transportation Research Part E: Logistics and Transportation Review*, 114, 398-415.
- Skinner, W. (1969), "Manufacturing: missing link in corporate strategy", *Harvard Business Review*, May-June, pp. 136-45.
- Slack, N. (1991), *The Manufacturing Advantage*, Mercury Books, London.
- Snow, C.C. and Miles, R.E. (1992), "Managing 21st century network", *Organisational Dynamics*, Winter.
- trauss, A. and Corbin, J. (1990), *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*, Sage, London.
- Suryanto, T., Haseeb, M., & Hartani, N. H. (2018). The correlates of developing green supply chain and quality services management practices: Firms level analysis in Malaysia. *International Journal of Supply chain and quality services Management*, 7(5), 316.
- Tesone, D.V. (2006), *Hospitality Information Systems and E-commerce*, Wiley, Hoboken, NJ.
- Thackray, J. (1986), "America's vertical cutback", *Management Today*, June.
- Tseng, M. L., Lim, M. K., Wu, K. J., & Peng, W. W. (2019). Improving sustainable supply chain and quality services capabilities using social media in a decision-making model. *Journal of Cleaner Production*, 227, 700-711.
- Tummala, R., & Schoenherr, T. (2011). Assessing and managing risks using the supply chain and quality services risk management process (SCRMP). *Supply chain and quality services Management: An International Journal*, 16(6), 474-483.



- Wagdi, O., & Rabie, R. (2021). The Impact of COVID-19 Pandemic on Business Activities and Lifestyle: Evidence from Egypt. *Annals of the Romanian Society for Cell Biology*, 25(4).
- Womack, J., Jones, D. and Roos, D. (1990), *The Machine That Changed the World*, Macmillan, New York, NY.
- Womack, J.P. and Jones, D.T. (1996), *Lean Thinking*, Simon & Schuster, New York, NY.
- Wu, J., Dunn, S., & Forman, H. (2012). A study on green supply chain and quality services management practices among large global corporations. *Journal of Supply chain and quality services and Operations Management*, 10(1), 182-194.
- Yang, Y., Liu, H., & Chen, X. (2020). COVID-19 and restaurant demand: early effects of the pandemic and stay-at-home orders. *International Journal of Contemporary Hospitality Management*. 32 (12),3809-3834.
- Zhu, Q. and Sarkis, J. (2007), "The moderating effects of institutional pressures on emergent green supply chain and quality services practices and performance", *International Journal of Production Research*, Vol. 45 No. 18, pp. 4333-4356.
- Zhu, Q., Sarkis, J. and Lai, K. (2013), "Institutional-based antecedents and performance outcomes of internal and external green supply chain and quality services management practices", *Journal of Purchasing and Supply Management*, Vol. 19 No. 2, pp. 106-117.
- Zollo, M., and Winter, S.G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science* 13 (3), pp. 339-351.