

**THE IMPACT OF DIGITAL TRANSFORMATION ON SUPPLY CHAIN
MANAGEMENT AND ORGANIZATIONAL PERFORMANCE OF
MANUFACTURERS IN THE UAE
A REVIEW PAPER**

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***Abstract:** The industrial and manufacturing sectors face several problems and challenges to maintain the supply chain with the same efficiency and accuracy of performance in the market. Companies operating in the UAE's manufacturing sector face inherited supply chain management problems. Despite researchers' increasing interest in digital transformation and its potential impact on organizational performance, there are still significant gaps in the literature when it comes to studying the impact of digital transformation on manufacturers from a supply chain management perspective. The majority of studies concentrate on the overall advantages of digital transformation or its effects on particular industries or jobs without thoroughly exploring the mediating role of supply chain management. Therefore, this study aims to identify the impact of digital transformation on the performance of manufacturers in the UAE and investigate the mediating role of supply chain management on this relationship. The study reviews the literature on these relationships to develop a conceptual framework. The review of past studies shows that digital transformation helps manufacturers to leverage advanced analytics and automation to optimize their supply chain operations, leading to reduced costs and increased efficiency which in turn improve their performance in the market. Furthermore, by adopting digital technologies, manufacturers can gain real-time insights into their supply chain operations, allowing them to make data-driven decisions and respond quickly to changing market demands. Ultimately, the combination of digital transformation and effective supply chain management is essential for manufacturers to meet customer expectations, improve profitability, and drive sustainable growth which all signs of significant organizational performance.*

Keywords: Digital Transformation, Supply Chain Management, Organizational Performance

1. Introduction

Countries across the globe are embracing a digital strategy, leveraging the massive digital transformations in the business world to apply digital technology in managing digital supply chains, thereby enhancing their competitiveness (Wang et al., 2023). Companies' shift to digital transformation, where they provide their services in a precise and rapid digital manner in record time, is considered one of the most important reasons for success and sustainability in business (Nourhan, 2022). In today's business world, digital transformation serves as a key driver and stimulant for growth in manufacturers, aiming to improve their performance. This puts increased pressure on companies to implement effective strategies based on modern technology and develop innovative solutions to maintain their competitiveness in the market. The technologies of the fourth technological revolution assist companies in transitioning to a

business model based on digital technologies, facilitating product innovation through devices connected to the Internet of Things worldwide (Vial, 2019).

Researchers have agreed on the impact of information technology capabilities on organizational performance in light of supply chain integration (Abu Khashaba & Mahmoud, 2017), as digital transformation has proven to be a powerful tool for simplifying supply chains and improving various aspects of business operations (Faris, 2019). However, to improve supply chain efficiency, we must replace legacy technology with modern digital systems (Pandey et al., 2021). Over the next two to three years, the supply chain is likely to have a greater impact with advances in artificial intelligence (Fatorachian & Kazemi, 2021). As supply chains accelerate regulatory processes, we anticipate a 30% reduction in operating costs, a 75% reduction in lost revenue, and a 75% reduction in inventory (Kurdi et al., 2023). The UAE is one of the most important countries in the world when it comes to logistics and supply chain. The UAE has undergone a transformation from a logistics hub to a supply chain hub, with a primary focus on Asia, Europe, the Middle East, and Africa. Economic diversification, effective implementation of the National Logistics Plan, and digital transformation by public and private companies throughout the region have driven this transformation. Investments in the logistics and supply chain sectors are key drivers for the UAE's supply chain industry development.

Over the past few years, a series of international crises have underscored the peril of relying on outdated, traditional supply chains without devising innovative solutions that incorporate digital technology. This approach protects countries from potential disruption or discontinuation of global supply chains, thereby shielding them from the risk of a shortage of goods and commodities (Al-Hadi & Mohamed, 2021). The industrial and production sectors face several problems and challenges, represented by the difficulty of maintaining the supply chain with the same efficiency and accuracy (Ezz El-Din, 2022). In the UAE, manufacturing companies face inherited supply chain management problems. The use of technology and digital transformation in supply chain operations contribute to some of these problems. For example, over time, Emirati companies, especially those in the manufacturing sector remain operating in the chemical industries face some challenges, such as a shortage of supplies. For example, the instability of raw material prices and transportation disruptions represent difficult problems for the sustainability of the supply chain in the chemical industry sector in the UAE (Alshurideh et al., 2023). Overcoming these difficulties requires a comprehensive and systematic approach given the unique requirements of the chemical sector. This study examines the relationship between the digital transformation of manufacturers in the UAE and their business and export performance, focusing on the current realities and challenges associated with this transformation. Supply chains must become flexible and sustainable. The pandemic has exposed the risks that manufacturers in the UAE may encounter if their supply chains lack operational readiness. Therefore, the aim of this study is to review the literature to identify the relationships between digital transformation, supply chain management, and organizational performance of manufacturers in UAE.

The Challenges in Manufacturing Sector of UAE

Digital systems provide high flexibility for supply chains through a set of activities, methods, and procedures that save cost and time in delivering materials from their sources to manufacturers and producers (Aityassine et al., 2022). They also provide protection against data loss, unauthorized access, and cyber-attacks on networks and connected computers (Naqvi et al., 2021). However, supply chain departments face real problems in using these systems effectively to ensure the timely arrival of raw materials (Salloum et al. 2020). Although digital transformation helps companies expand, spread, and reach a larger segment of customers locally and internationally through various technology applications, the widespread availability

of digital technologies has disrupted established business models in many industries (Riasanow et al., 2018). This is due to the presence of many obstacles that hinder the digital transformation process within companies, the most important of which are: the difficulty of setting priorities for implementing digital transformation mechanisms, the lack of a specific budget for these programs, as well as fear of information security risks resulting from the use of various technological means, as well as the lack of scientifically and practically qualified competencies and capabilities in dealing with digital transformation programs and change within companies, and other legal and sovereign obstacles that stand in the way of the successful implementation of digital transformation programs and achieving their desired goals, and thus affecting the strategic performance of manufacturers in Egypt (Nourhan, 2022). This study assumes that the absence of a business strategy based on digital transformation and successful supply chain management will significantly weaken manufacturers' ability to face contemporary challenges and develop solutions for various crises. Therefore, it is crucial to investigate these obstacles and understand their impact on the adoption of digital transformation in the Emirates.

In the same context, Kurdi et al.'s study (2023) aimed to evaluate the impact of the modern supply chain based on digital transformation, modern technology, and supply chain risks on the organizational performance of companies operating in the food industry sector in the UAE. The research results showed that these companies are unable to fully transform digitally and still rely on traditional methods in many logistics operations. The results of this study indicate the importance of making the supply chain process fully digital and enhancing digital transformation in supply chain management practices in the food industry sector in order to be able to compete, be effective, and be productive. Lee et al.'s study (2022) showed that supply chain activities transcend the organizational boundaries of companies and depend on external factors. In countries with complete digital transformation, it is not straightforward to face the above-mentioned challenges and improve organizational performance. Ali's study (2022) showed that digital transformation has enabled many companies to overcome this problem due to the need for exploration. Many manufacturing organizations, including food manufacturing, are increasingly seeking innovative and creative technologies to improve the integration of business processes and supply chains (Abu Khashaba & Mahmoud, 2017). Researchers emphasize the importance of studying the impact of digital transformation on manufacturing companies through supply chain risk management and the organization's performance (Gurtu & Johny, 2021). Furthermore, Fari's (2021) study revealed that the primary barriers to digital transformation include a lack of knowledge and experience, inadequate digital transformation plans, resistance to change, a lack of cultural flexibility, a lack of clarity in the vision and goal to benefit from digital transformation, a lack of necessary resources, and a lack of alignment between the traditional work system and the modern digital system (Fari, 2021). However, in the UAE, research in this field remains unanalyzed and lacks practical solutions, particularly regarding the impact of digital transformation on the efficiency of supply chain management and the performance of manufacturers. Therefore, the results of this study will help shed light on the complex issues related to how to carry out an effective digital transformation. The literature hasn't explored the connection between digital transformation and the performance of manufacturers in the UAE, with supply chain management acting as a mediating factor. However, there is a gap in the UAE's empirical research on the integration of these concepts and their interrelationships within a unified theoretical framework. Additionally, studies investigating the relationship between digital transformation and the performance of manufacturers in other countries are scarce. To address these issues and gaps, this study aims to understand and analyze the interrelationships between these variables. We can conclude that digital transformation is one of the most prominent files that most countries are currently working on.

2. Literature Review

a. Digital Transformation

Since the start of the third millennium, the global economy has gone through huge and quick changes because of the Fourth Industrial Revolution. This revolution was different from the others in terms of its intensity, complexity, and scope because it was based on a new technology phenomenon called digital transformation, which means that digital technology quickly became a part of institutions and organizations' infrastructure. These technologies include the Internet of Things, cloud computing, big data analytics, 3D printing, and artificial intelligence. The importance of the technological revolution lies in its profound impact on societies through its ability to produce huge amounts of new data, improve information and knowledge transfer, enhance production, and facilitate innovation (Ibrahim & Benabdelhadi, 2021). Digital transformation is an important aspect of our era because it focuses on transferring current processes to digital technologies. Digital transformation has become an important topic all over the world, as well as being a major trend that changes society and business in the future (Parviainen et al., 2017). The term "digital transformation" refers to the changes that occur at work due to the use of new technology. Digital transformation, also known as the ability to transform existing products or services into new digital domains to provide a competitive advantage for an organization (Tobias et al., 2019), refers to the process of using digital technologies to radically transform organizations towards digital systems and tools (Parida et al., 2019).

The impact of globalization, rapid technological developments, competition, new business models, emerging new markets, and ever-changing consumer desires have become daily challenges for most companies. These ever-changing issues, when combined with more traditional risks to businesses and economic life cycles, are pushing companies to become more efficient and resilient in order to survive (Rima & Mindaugas, 2018). In this regard, digital transformation must add value to employees and customers in every global market. However, organizational transformation barriers cause digital transformation initiatives to either fail or progress slowly (Gupta, 2018). Digital transformation is the application of digital technology and data, as well as an interaction to create new activities or change existing ones. Digital transformation is defined from different perspectives; for example, the European Commission (2019) defined digital transformation as the convergence of new technologies and the integration of physical and digital systems, the dominance of innovative business models and new processes, and the development of smart products and services. The OECD (2018) states that digital transformation represents the translation of organizational data and processes into a machine-readable format for businesses. Schwertner (2017) defines digital transformation as the use of technology to create new business models, processes, programs, and systems that lead to more profitable revenues, competitive advantage, and increased efficiency. Concepts such as the Internet, big data, information systems, and smart devices are part of digital transformation (Parlak, 2017). The use of information technology is critical to the success of individuals, organizations, and societies, and thus the increased production and use of knowledge in all aspects of life compels societies and organizations to embrace digital transformation (Alaa et al., 2021). Most companies prioritize the first stage of the digital transformation process, emphasizing the need to establish a common case or starting point for managing the transformation process (Berghaus & Back, 2017). When implementing digital transformation initiatives or measures, it's crucial to establish clear criteria that will determine the success or failure of this process (Dirk et al., 2021).

According to Deloitte (2018), the use of technology to improve organizational performance is known as digital business. Digital technology enables improved organizational processes and new business models in a digitally transformed company. Bloomberg (2018)

argues that digital transformation requires a company to better handle change and prepare for it by all means, making it an uncomplicated process from start to finish. Digital transformation affects entire companies and their business practices; it goes beyond digital transformation, which entails changing simple organizational processes and tasks (Alaa et al., 2021). Companies that rely on digital transformation and view responsive market orientation as a priority are more likely to achieve their goals, win fair market share, satisfy stakeholders, and contribute to the national economy (Brandon et al., 2020). This re-arranges organizational processes for successful business change and the creation of high-market-value services or products (Li et al., 2018). In addition, digital transformation leverages digital technologies to facilitate cross-border interactions with suppliers, consumers, and competitors (Singh & Hess, 2017). Digital transformation in business is now a buzzword in academic and corporate circles. Almost every industry, including business, education, banking, government, and manufacturing, is undergoing digitalization or automation during the Fourth Industrial Revolution (Verina & Titko, 2019).

b. Supply Chain Management

Supply chain management encompasses the various processes of planning, implementing, and controlling the movement of materials and finished goods along the way to end users. The supply chain's activities begin with the customer's order and end when the product is in the customer's hands. Achieving this requires the contribution of all parties involved in the supply chain, from raw material suppliers to manufacturers, distributors, wholesalers, and retailers (Al-Saadi, 2020). As described above, our study defines supply chain management as the strategic coordination and integration of all activities involved in the production, purchase, transformation, and distribution of goods and services. It encompasses the entire process, from the origins of raw materials to the delivery of the final product to the end consumer. The primary goal of supply chain management is to ensure the efficient and cost-effective flow of goods and information across the various stages, including suppliers, manufacturers, distributors, retailers, and customers.

Supply chain management is important because it enables companies to effectively manage the flow of goods and services from the point of origin to the point of consumption. This includes supervising the purchase of raw materials, coordinating production processes, managing transportation and logistics, and ensuring timely delivery to customers. Effective supply chain management can help companies reduce costs, improve efficiency, and enhance customer satisfaction. Additionally, in today's interconnected global economy, supply chain management is critical for companies to navigate complex networks of suppliers, distributors, and customers across different regions and markets. For instance, a multinational electronics company depends on efficient supply chain management to procure components from diverse suppliers across different countries, synchronize production processes across multiple factories, and guarantee the timely delivery of finished products to customers worldwide. By efficiently managing transportation and logistics, a company can reduce costs associated with shipping and warehousing, improve inventory levels, and ultimately enhance customer satisfaction by meeting delivery deadlines.

Furthermore, the ability to navigate complex networks of suppliers and distributors allows a company to quickly adapt to changes in demand or disruptions in the supply chain. This flexibility is critical in today's fast-paced global marketplace, where unexpected events such as natural disasters or political unrest can significantly impact the availability and delivery of goods. By building strong relationships with trusted suppliers and distributors, a company can quickly find alternative sources or routes to ensure a steady flow of materials and products. This flexibility not only protects the company from potential disruptions but also enables it to seize new opportunities and expand into new markets.

Implementing effective supply chain management practices can provide numerous benefits to organizations. One of the main benefits is increased efficiency and cost savings. By streamlining processes and eliminating inefficiencies, organizations can reduce operating costs and improve their bottom line. Additionally, supply chain management allows for greater visibility and control of the entire supply chain, enabling organizations to make informed decisions and respond quickly to market changes. This can lead to improved customer service and satisfaction, as organizations are better equipped to meet customer demands and deliver products on time.

Furthermore, enhancing supply chain management can foster collaboration and partnerships with suppliers and distributors, creating a more efficient and streamlined process. With effective supply chain management practices in place, organizations can build stronger relationships with their partners, leading to increased trust and reliability. This collaboration can also open the door to innovative ideas and continuous improvement as all stakeholders work together to optimize the supply chain and drive growth. Ultimately, enhancing supply chain management not only benefits individual organizations but also contributes to the overall success and resilience of the industry as a whole. There are several reasons why researchers need to focus on supply chain management. First, supply chain management is a complex and dynamic field that requires ongoing research and analysis to stay abreast of the latest trends and best practices. By conducting research in this area, researchers can contribute to the development of new theories, models, and frameworks that can enhance the understanding and management of supply chains. Second, supply chain management is an important aspect of business operations, as it directly impacts a company's ability to deliver products and services to customers efficiently and effectively.

As a result, researchers can identify areas for improvement and suggest strategies to streamline operations, reduce costs, and increase customer satisfaction by studying supply chain management. Additionally, studying supply chain management can help researchers understand the complexities and challenges that organizations face in global markets, such as sourcing materials from different countries and managing international logistics. This knowledge can provide valuable insights for companies looking to expand their operations internationally and improve their supply chain networks. Ultimately, research conducted in this area can lead to practical recommendations and guidance for companies to improve their supply chain performance and gain a competitive advantage in the market.

c. Organizational Performance

Researchers in the organizational field use the term "performance" to describe companies' actions in many aspects, including financial performance, market performance, revenue and profits, and business growth (Inta & Irina, 2017). Organizational performance is one of the key variables of interest to academics in all branches of management because companies can only succeed and advance when they achieve profits and business growth (Bhola & Basu, 2015). In this regard, Wheelen and Hunger (2010) argue that organizational performance shows how a company uses its resources to achieve its goals. Hence, organizational performance is the pinnacle of a company's work.

The literature on organizational performance notes that most researchers evaluate the organizational performance of companies using financial performance (Al-Matari et al., 2014; Bianchi, 2015); for instance, profitability serves as a significant indicator of organizational performance (Qistina & Khashini, 2017). Industries are the engines of economic development and long-term business growth in developing countries (Abdul-Mohsin, 2020). Manufacturers have become important assets for a large number of countries and represent a dynamic element in the global economy (Ali et al., 2021). Because of globalization and fierce competition in local markets, studying organizational performance has become an important topic. To enhance

organizational performance, companies must be able to make a significant difference by experimenting with innovative business models and relying on digital transformation to improve organizational performance.

Leaders and managers in these companies must prioritize creativity, entrepreneurship, and innovation in order to grow their operations while enhancing profitability (Qalati et al., 2020). Business growth and profitability are key priorities for companies, and focusing on enhancing these two factors will help companies enhance organizational performance. Furthermore, companies evaluate their performance based on their ability to achieve their objectives. Therefore, we can define a company's performance as its capacity to accomplish predetermined objectives. Therefore, the company needs to select a specific objective to pursue, and the evaluation of its performance hinges on its ability to accomplish these goals effectively (Inta & Irina, 2017).

The concept of organizational performance lies at the heart of strategic management theory, and most studies in this field use organizational performance models to investigate the financial and profitability capabilities of companies as well as growth capabilities in different markets and address issues related to organizational performance empirically. The importance of performance in management is evident through the many formulas for improving performance. The literature reveals that we can judge organizational performance when the company achieves its goals with the least number of resources. The literature indicates that the company achieves targeted profits through the effective use of organizational resources. Almatrooshi et al. (2016) proposed that the effectiveness of all organizational functions, in relation to their goals, determines organizational performance. However, the inability to manage organizational resources may impact profits and growth, ultimately leading to business collapse. Many factors can contribute to a company's failure, such as the inability to formulate long-term business plans, ineffective marketing or advertising strategies, a lack of innovation in marketing plans, inadequate management expertise, a lack of business management experience, the inability to establish an online business plan, subpar production lines, and inadequate marketing resources. All of these variables may contribute to business failure and poor organizational performance (Tsai, 2015).

It is clear that organizational performance is a dynamic concept, and as a result, the correct interpretation of performance will help research develop accurate performance indicators; for example, Qistina and Khashini (2017) proposed a model that describes how current performance affects future performance. In this regard, some researchers see organizational performance as a systematic means of measuring organizational effectiveness that takes into account interactions with external and internal environments. As a result, there are three main elements that affect organizational performance (Ahmad, 2018):

- Employee activities take place within the organizational units that best suit their areas of specialization.
- A set of principles guide the organization's activities.
- Economic, cultural, and social environments shape the implementation of organizational actions.

Despite their relatedness, firms engage in these three areas differently from one another. Although they result from social, economic, and cultural impacts, they differ from individual efficiency and productivity per unit of production (OECD, 2016). According to Tomal and Jones' definition from 2015, an industrial firm's performance can also be defined as one of the metrics used to assess organizational performance, which reflects the firm's actual output. Firm performance is critical to boosting local market productivity and economic growth. In fact, the growth of industrial firms has a significant and positive impact on the economy, such as job

creation, innovation, entrepreneurship, and competitiveness. To achieve this, firms can expand their businesses and adopt innovative business strategies. Encouraging innovation in industrial firms can increase market productivity and growth, as well as increase profits (OECD, 2017).

In summary, the literature frequently highlights the various reasons and instances of business failure among firms due to inadequate financial and marketing performance. Firms can protect themselves against both global and local financial crises if they understand these reasons. Some experts have stated that internal shortcomings were one of the main reasons for business failure, while others believe that external factors caused companies to close (Lotfi et al., 2013; Wang et al., 2015). Others have emphasized that laying a solid foundation for a company's plan is a crucial element for its success (James, 2015). While this study assumes that the absence of a business strategy based on digital transformation and successful supply chain management will make manufacturers extremely vulnerable to all types of crises, failure to take these variables into account is a reason for these businesses to fail. Digital transformation is one of the most important competitive strategies for companies today. Therefore, stimulating the sector's leadership to fully digitalize manufacturers is crucial from a macroeconomic perspective. In addition, business management is working to extend the principles of agile development in supply chain management to include the entire organization. This helps companies to be more responsive to change, reduce time to market, and reduce costs without sacrificing quality. In short, the topic of manufacturers' performance is an important topic that needs further studies and investigation, especially the organizational performance dimensions of organizational performance. The following section explains the measures and dimensions of organizational performance.

3. Conceptual Framework

Organizational development literature has demonstrated that digital transformation and supply chain management significantly enhance the performance of manufacturing companies. This suggests the need for a framework model that can provide empirical evidence about the relationship between digital transformation, supply chain management, organizational performance and the potential role of these variables to support manufacturers in achieving market success in the UAE. Table 1 shows the results of previous studies that investigated the interrelationships between these variables.

Table-1: Results of previous studies.

Source	Variables	Results
Khan et al., 2021	Digital Supply Chain Management, Organizational Performance.	The results showed that supply chain resilience and proactivity have the highest impact on organizational performance.
Centobelli & Cerchionem, 2020	Flexible Supply Chain Transformation, Digital	Technology is emerging as a necessary but insufficient enabler for businesses to manage flexible supply chains.
AlMulhim, 2021	Flexible supply chain management, organizational performance, digital technology.	Digital transformation has no direct significant impact on organizational performance. However, smart technologies play an important role in developing the link between digital

Source	Variables	Results
		transformation and organizational performance.
Nayal et al., 2022	Sustainable Development Strategy, Sustainable Supply Chain Company Performance.	Supply chain collaboration and coordination positively impact sustainable development strategy and digital transformation
Rehman et al., 2022	Digital transformation, smart technologies, environmental innovation, sustainable supply chain performance.	There are strong positive and statistically significant relationships between environmental innovation, sustainable development strategy, digital transformation and smart technologies.
Ning & Yao, 2023	Digital transformation, supply chain capabilities, supply chain competitive performance.	There are statistically significant relationships between digital transformation, supply chain capabilities, and competitive performance.
Yang & Lin, 2023	Digital transformation, digital logistics platform, organizational performance.	Digital transformation has a direct impact on the organizational performance of logistics companies through the digital platform.
Lee et al., 2022	Digital Supply Chain Management, Organizational Performance.	Adopting digital supply chain management has enabled manufacturing companies in Malaysia to compete in markets and improve organizational performance.
Chouaibi et al., 2022	Digital Transformation, Organizational Performance.	Digital transformation helps organizations achieve higher performance, while also providing an overview of potential related risks.
Othman, 2023	Supply chain integration, organizational culture, company performance.	Supply chain integration is statistically significant in relation to flexible organizational culture and company performance.
Al-Jazzar, 2021	Digital Transformation, Digital Supply Chain.	Digital transformation plays an important role in providing supply chain solutions and stimulating economic development.
Said, 2022	Digital Transformation, Sustainability Performance.	Digital transformation requirements link to the economic dimension of supply chain sustainability.
Al-Balushia, 2020	Digital Transformation, E-Government.	Digital transformation has contributed to raising the performance of government institutions in the

Source	Variables	Results
Tayseer, 2022	Digital transformation, organizational performance, sustainable development.	Sultanate of Oman through digital platforms. In developed countries, economic units have been able to achieve sustainable business development by adopting digital transformation.
Masarwa, 2022	Supply Chain Management Integration, Information Technology.	Information technology (equipment, software, human resources, networks, and databases) has a statistically significant effect on the integration of supply chain management (suppliers, customers, and operations) in Jordanian manufacturers.
Al-Batayneh et al., 2021	Business Intelligence, Supply Chain Performance.	The results showed that the business intelligence variable as a whole had a statistically significant effect on supply chain performance, as did each dimension of business intelligence, namely technology, individuals, and strategic alignment.
Al-Mutairi, 2016	Supply Chain Resilience, Organizational Performance.	The results of the study showed that there is a statistically significant relationship between the dimensions of supply chain resilience and the overall performance indicators of manufacturers in Kuwait.
Al-Jubouri, 2020	Information Technology, Sustainability, Supply Chain Integration.	There is a statistically significant effect of supply chain integration (integration with distributors, and integration with customers) on sustainability, as well as a statistically significant effect of information technology on sustainability in its dimensions in oil manufacturers in Iraq.
Abdul Rab, 2019	Supply Chain Management Practices, Organizational performance.	The study's findings confirmed that supply chain practices play a significant role in improving the operational performance of manufacturers in Yemen.
Al-Rafii, 2022	Supply Chain Management, Operations Performance.	In the oil refinery, there is a significant correlation and influence between supply chain management success factors and operations performance.

Despite researchers' increasing interest in digital transformation and its potential impact on firm performance, there are still significant gaps in the literature when it comes to studying the impact of digital transformation on industrial firms from a supply chain management perspective. Despite the abundance of research on the topic, most of it concentrates on the overall advantages of digital transformation or scrutinizes its effects on specific industries or functions, leaving the mediating role of supply chain management between digital transformation and industrial firm performance largely unexplored. A review of published studies on the topic reveals that there is a lack of comprehensive studies that specifically address the relationship between digital transformation and performance in industrial firms and supply chain management. This gap in research is significant because industrial firms operate in a unique environment with complex supply chains, and understanding the impact of digital transformation on their performance is critical to their success.

By examining this relationship, researchers can provide valuable insights and recommendations for companies looking to embark on their digital transformation journey. Therefore, conducting comprehensive studies in this area is essential to bridge the current knowledge gap and help manufacturers improve their supply chain management through digital transformation, especially in the business and industrial environment in the UAE. Bridging the gap in the literature on digital transformation in UAE manufacturers is critical to understanding the industry's current state and identifying areas for improvement. By studying these companies' experiences and strategies, researchers can provide valuable insights and recommendations for successful digital transformation initiatives. In addition, this research can help inform policymakers and industry leaders on the steps needed to foster a digitally advanced and competitive industrial sector in the UAE. Overall, bridging this literature gap will contribute to the growth and development of the UAE's industrial landscape in the digital age.

In conclusion, filling in the gaps in the research on how supply chain management affects the relationship between digital transformation and the performance of industrial firms is important for a full understanding of the link between these factors. By studying the mediating role of supply chain management, researchers can identify the specific mechanisms through which digital transformation affects industrial firm performance. Researchers can use this knowledge to develop strategies and interventions that enhance supply chain management practices and boost overall performance in the digital transformation era. Ultimately, bridging this gap in the literature will contribute to advancing knowledge in both supply chain management and digital transformation, benefiting researchers and practitioners in this field. Our research shows that putting the connection between digital transformation, supply chain management, and the performance of industrial firms into a conceptual framework will help us understand the nature of the connection between these factors and how digital transformation helps production and industrial supply chains succeed in the market. Therefore, this study develops a conceptual framework based on theoretical and empirical background. The framework as shown in Figure 1 links an independent variable (digital transformation), a mediator (supply chain management), and a dependent variable (organizational performance).

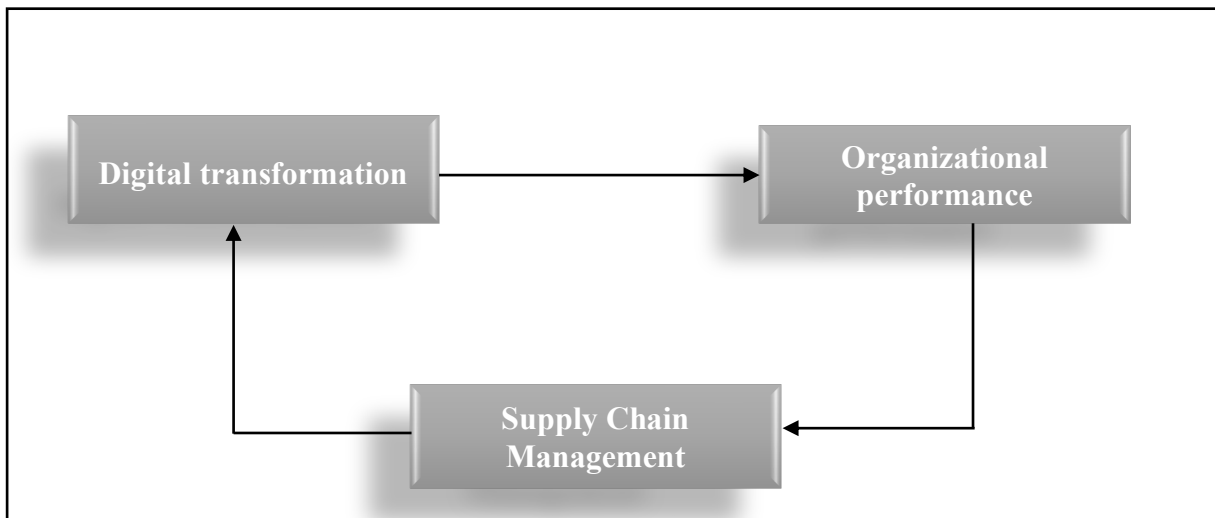


Figure-1: A proposed conceptual framework for improving UAE manufacturers' performance

Through the above, our study posits that the changes that occur when organizations embrace digital transformation can have a fundamental impact on their organizational structure. This can include restructuring activities, functions, responsibilities, tasks, and processes to align with new digital technologies and processes. In addition, digital transformation can have an impact on supply chain management, necessitating that companies adapt and evolve their organizational structure to meet the demands of the digital economy. Ultimately, these changes can significantly impact the performance and success of the organization as a whole.

By embracing digital transformation, organizations can streamline processes, improve efficiency, and enhance communication internally and externally. This shift toward a more digitally focused structure can also lead to increased innovation, flexibility, and competitiveness in the market. As a result, organizations that successfully navigate the changes brought about by digital transformation are better positioned to thrive and grow in an ever-evolving business landscape. In addition, digital transformation can also open up new opportunities for revenue growth and expansion into new markets. By leveraging technology and data analytics, organizations can gain valuable insights into consumer behavior and market trends, allowing them to make more informed business decisions. In summary, embracing digital transformation can help UAE organizations stay ahead of the curve and adapt to changing customer preferences and industry trends. The benefits of digital transformation are immense and can ultimately lead to long-term success and sustainability for organizations willing to embrace change within the UAE.

4. Conclusions

Supply chain management is a crucial aspect of economic institution management, as it facilitates the utilization of human capabilities and their transformation into outputs that can benefit the institution. Supply chain management plays a crucial role in institutional development, especially during a period when countries' progress and institutions' success closely correlate with their progress in supply chain areas. The fundamental changes that supply chain management brings about reflect this progress in the institution, thereby enhancing its performance. At present, countries worldwide are adopting a digital strategy, leveraging the tremendous digital transformations in the business world to enhance their

competitiveness through the application of digital technology in digital supply chain management.

This study analyzes the relationship between the digital transformation of manufacturers in the UAE and their performance improvement. It focuses on the current realities and challenges associated with this transformation, with the aim of improving these companies' performance through increased profitability and business growth. As a result, it is clear that manufacturers in the UAE must understand and acknowledge the impact of digital transformation and supply chain management on their overall performance. One of the reasons is that digital transformation has become an imperative in today's fast-paced and technologically advanced business landscape, as it provides opportunities to increase efficiency, reduce costs, and improve customer experiences. In addition, supply chain management plays a crucial role in ensuring smooth operations and timely delivery of goods and services.

By integrating digital technologies into their supply chain operations, manufacturers can streamline operations, enhance visibility, and effectively manage inventory and logistics. Therefore, understanding the importance of both digital transformation and supply chain management is vital for manufacturers to remain competitive in an ever-changing market. With digital transformation, companies can leverage advanced analytics and automation to optimize their supply chain operations, leading to reduced costs and increased efficiency. Furthermore, by adopting digital technologies, companies can gain real-time insights into their supply chain operations, allowing them to make data-driven decisions and respond quickly to changing market demands. Ultimately, the combination of digital transformation and effective supply chain management is essential for manufacturers to meet customer expectations, improve profitability, and drive sustainable growth which all signs of significant organizational performance.

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