

The Effect of Supply Chain Management on Manufacturing Performance and Product Quality in Iraqi Firms

(An Analytical Study of the Opinions of a Sample of Employees at the General Company for Leather Industries)

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تأثير إدارة سلسلة التجهيز على أداء التصنيع وجودة المنتج في الشركات العراقية
(دراسة تحليلية لآراء عينة من العاملين في الشركة العامة للصناعات الجلدية)

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Abstract

The study aims to test the impact of supply chain management on manufacturing performance and product quality in the General Company for Leather Industries. To achieve the study objective, the survey analysis approach was adopted. (68) questionnaires were distributed to the company's employees. Descriptive statistics were relied upon in analyzing the data, and the following statistical tools were used (arithmetic mean, standard deviation, coefficient of variation, simple linear regression equation) based on the (SPSS) program. Direct hypotheses were also tested. The study reached a set of results, the most important of which is that there is interest in supply chain management, manufacturing performance, and product quality and that supply chain management affects manufacturing performance and product quality. The study concluded that the company's management must commit to developing the supply chain, paying attention to manufacturing processes and working to continuously improve product quality by reducing waste, damage, and overproduction and adopting high-quality raw materials.

Keywords: Supply chain management, manufacturing performance, product quality.

المخلص

تهدف الدراسة إلى اختبار تأثير إدارة سلسلة التجهيز على أداء التصنيع وجودة المنتج في الشركة العامة للصناعات الجلدية، ولتحقيق هدف الدراسة تم اعتماد الأسلوب التحليلي، إذ تم توزيع (68) استبانة على العاملين في الشركة العامة للصناعات الجلدية، وتم الاعتماد على الإحصاء الوصفي في تحليل البيانات، وتم استخدام الأدوات الإحصائية التالية

(المتوسط الحسابي، الانحراف المعياري، معامل الاختلاف، معادلة الانحدار الخطي البسيط) بالاعتماد على برنامج (SPSS)، كما تم اختبار الفرضيات المباشرة، وتوصلت الدراسة إلى مجموعة من النتائج أهمها أن هناك اهتمام بإدارة سلسلة التجهيز وأداء التصنيع وجودة المنتج وأن إدارة سلسلة التجهيز تؤثر على أداء التصنيع وجودة المنتج. وخلصت الدراسة إلى أن إدارة الشركة يجب أن تلتزم بتطوير سلسلة التوريد والاهتمام بعمليات التصنيع والعمل على تحسين جودة المنتج بشكل مستمر من خلال تقليل الهدر والتلف والإفراط في الإنتاج واعتماد مواد أولية عالية الجودة.

الكلمات المفتاحية: إدارة سلسلة التجهيز، أداء التصنيع، جودة المنتج.

Introduction

Global markets are witnessing fierce competition between industrial companies to obtain a share of the future. Companies have been interested in the dimensions of the operations strategy, which is affected by many variables, including supply chain management activities. This topic has received the attention of several writers. The importance of studying supply chain management, manufacturing performance, and product quality has emerged in the supply chain management, production, and operations management literature. Based on the above, the topic of the role of supply chain management activities in enhancing manufacturing performance and product quality deserves study due to its importance in developing the General Company for Leather Industries and increasing its ability to compete, survive, and grow, which requires defining this role in the company. This study included the following topics: (Topic One: Study Methodology. Topic Two: Theoretical Aspect. Topic Three: Field Aspect. Topic Four: Conclusions and Recommendations).

The first topic/study methodology

First: The study problem

Industrial companies are currently experiencing many changes due to the technological revolution and artificial intelligence, which led to the use of technology in manufacturing processes and increased competitiveness between industries, which increased companies' interest in continuously improving their performance and improving the quality provided to customers to meet their various requirements. The scientific study problem can be formulated with the question: How does supply chain management impact manufacturing performance and product quality at the General Company for Leather Industries? The following sub-questions branch out from the central question:

1. What is the level of supply chain management at the General Company for Leather Industries?
2. What is the level of manufacturing performance in the General Company for Leather Industries?
3. What is the level of product quality at the General Company for Leather Industries?
4. If supply chain management effect on manufacturing performance and product quality at the General Company for Leather Industries?

Second: The importance of the study:

The importance of the study stems from the following:

1. Supply chain management, product quality, and manufacturing performance are vital topics in general business management and production and operations management.

2. The study contributes to directing senior management in the field of study to establish supply chain management to achieve manufacturing performance and product quality.
3. Applying the study in manufacturing, as factories are a primary nucleus for societies' development, growth, and progress.
4. Building an intellectual and cognitive base that other researchers may be able to benefit from as a reference framework.

Third: Study objectives:

The study aims to:

1. Provide a conceptual philosophy for the primary study variables represented by supply chain management, product quality, and manufacturing performance by presenting the most critical intellectual opinions related to these topics in the administrative field.
2. Diagnosing the nature and level of supply chain management and measuring it in the General Company for Leather Industries.
3. Diagnose and measure the nature and level of product quality in the General Company for Leather Industries
4. Diagnose and measure the nature and level of manufacturing performance in the General Company for Leather Industries.
5. Study the impact of supply chain management on product quality, and manufacturing performance in the General Company for Leather Industries.

Fourth: The hypothetical model of the study

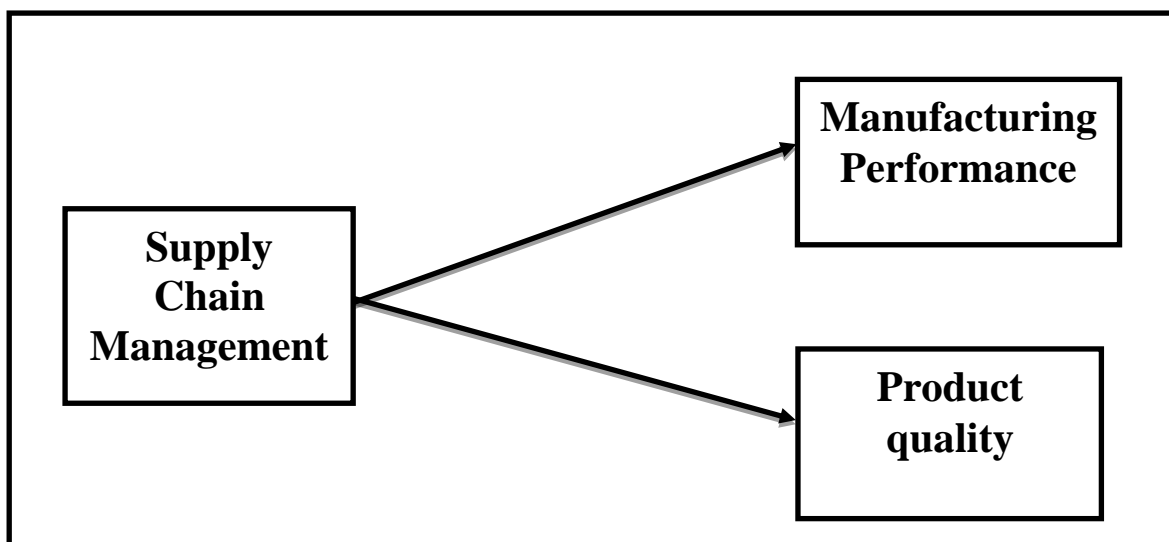


Figure (1) The hypothetical model of the study

Source: Prepared by the researchers

Fifth: Study hypotheses

1. The first main hypothesis (there is a significant effect of supply chain management on manufacturing performance).
2. The second main hypothesis (there is a significant effect of supply chain management on product quality).

Sixth: Study community and sample

The General Company for Leather Industries was formed in (1976) as a result of merging the General Company for Leather Industry, which was established in (1945); at that time, it contained one factory for tanning large hides, and then the bag factory was established in 1969, with the Bata General Company, which was established in 1932, which contained a small factory for manufacturing shoes. Then, the famous shoe factory in Kufa merged in 1970. The company includes several factories distributed over three sites: the Kufa site, the Zaafaraniya site, and the Eastern Karrada site. The latter is considered the leading site in the company and includes the general administration, the advanced shoe factory, and the leather shoe factory (the application site). The company has many sales showrooms and distribution outlets distributed throughout Iraq. According to the latest statistics, the total study community amounted to (83) individuals. To determine the sample size, the Cochran equation was used, which deals with continuous data such as the five-point Likert scale, as follows:

$$n = (t)^2 \times (S)^2 / (d)^2$$

(t) refers to the confidence level, which is equal to 95%, i.e. its value is 1.96, and (S) is the value of the standard deviation of the population, which is (0.83), which is the result of dividing the five options of the five-point Likert scale by (6), which is the number of standard deviations, (d) is the acceptable margin of error for the arithmetic mean, which is (0.15), resulting from multiplying the options of the five-point Likert scale by (0.03), which is the acceptable margin of error in study, Therefore, the sample size is 68 individuals, and the following Table (1) shows the study community and its sample.

Table (1) Study community and sample

Total population	Distributed questionnaires	Returned questionnaires	Valid questionnaires for statistical analysis	Response rate
83	75	71	68	%96

Seventh: Study criteria and tools

The study relied on a set of sources for the practical and theoretical aspects, as follows:-

1. The theoretical aspect. The study relied on collecting sources for the theoretical element from electronic sites on the Internet, magazines, books, letters, theses, and published study.
2. The practical aspect: Data and information were obtained through the questionnaire that was distributed and retrieved from the sample members, which is the primary source for the practical element, whose paragraphs were designed from ready-made scales from foreign studies that dealt with the study

variables after translating them and making the necessary modifications to them to suit the requirements of the study and its local community. We relied on (Yizengaw, 2016)) to measure supply chain management, the (Al-Qaraghoul, 2021) model to measure manufacturing performance, and the (Al-Moussawi, 2018) model to measure product quality. The Cronbach's alpha coefficient for the questionnaire reached 0.92, which is good stability, and validity can be measured by the stability root, which reached 0.95, a value greater than 0.67, which most statisticians, measurement, and evaluation experts agreed upon.

Section Two / Theoretical Framework

First: Supply Chain Management

1. Supply Chain Concept

The supply chain process is fundamentally linked to corporate business; no business organization today can exist without it. The supply chain is defined as "a set of objectives accompanying the organization's functions and activities that produce and provide a product or service by reducing the costs of entering new markets and improving the quality of operations. The chain is linked to a sequential and organized relationship that begins with the primary suppliers of raw materials and ends with the customer (Stevenson: 2012: 4)

Mutuerandu (2014, 62) explained that supply chain management is affected by a set of factors, including the type of industry, the size of the organization, its location in the supply chain, and the type and length. (Tanco et al., 2015: 13) Indicated that it is a group of diverse units that carry out overlapping operations to flow materials and information. (Aguilera et al, 2016: 163) Indicated that it is the management concerned with everything related to activities and administrative functions to transform raw materials into finished products provided to customers through distribution channels, and Heizer & Render (2017:555) defined it as the coordination of all supply activities starting with raw materials and ending with satisfied customers. The supply chain includes suppliers, manufacturers, distributors, wholesalers, or retailers who provide the product or service to the final customer, as well as increasingly integrated and long-term relationships with suppliers and joint efforts that improve innovation, design speed, and reduce standard costs. These efforts, when part of the organization's strategy, can significantly enhance the ability of all partners. (Frazzon, 2019: 89) defined it as representing the integration and synchronization of the product's entire value chain across different organizations and building an interconnected and transparent system with timely communication that enables it to manage flows and improve the supply chain, leading to an independent network. It appears from the above that supply chain management is a set of activities carried out by the organization to build long-term relationships between its suppliers and customers and improve the performance of its work, enabling it to achieve a competitive advantage.

2. Importance of Supply Chain

Studies have shown over the years that effective flexibility in supply chain management improves the organization's overall performance in terms of customer satisfaction and performance. Supply chains also help reduce the number of backorders, lost sales, and late orders and increase customer satisfaction, as well as give companies the ability to respond to and accommodate changes in demand, such as seasonality, react to and accommodate periods of poor manufacturing performance, respond to periods of poor supplier

performance and respond to and accommodate new products, new markets or new competitors (Delic & Eysers, 2020:3). Supply chain companies can witness a decrease in the number of backorders, lost sales, and late orders and increase customer satisfaction. He added that supply chain management helps companies maintain competitiveness and efficiency in dynamic environments without compromising performance (Al-Shboul, 2017:177).

3. Supply Chain Objectives

Supply chain management aims to remove barriers and coordinate between processes and procedures. Monitor and control the organization with chain integration by creating links between each chain component to assist decision-making better and allow all chain components to cooperate more flexibly. Produce a view of the supply chain and identify bottlenecks. A fully integrated supply chain is described as one vertically integrated from top management or supply chain management and enables the exchange of information and enhances performance across the chain. It integrates customer and supplier information in the organization through business communications, cross-functional teams at home, and customer requests. These processes make the chain valuable to the organization (Krajeweki et al.:2016:568).

4. Requirements for the success of the supply chain:

Achieving success in the supply chain for organizations includes several factors, which are (Jassim, 2010: 43):

- A. Cooperation and stability: represented by reliability, coordination, and long-term relationships with the supplier.
- B. Effective communication requires integrating technology and means of communication between partners.
- C. Reliability: This is represented by sharing information, joint operations, goals, and ultimate objectives, i.e., dealing with the supplier as a partner.
- D. Clarity of the supply chain: This is done by the partners in the chain linking its components to access data on the actual inventory.
- E. Ability to manage the event: It refers to detecting and responding to unplanned events, such as a delay in shipment or a decrease in inventory flow for some materials.
- F. Trust: Trust is an essential element between partners in the chain to achieve the partnership's goals, which leads to mutual benefits.

5. Performance measurement:

Measuring the performance of the supply chain is necessary to enhance the supply chain's expected functions and identify the problems that arise. There are various chain performance measures, such as measuring inventory turnover and delivery time, quality assurance, and response time to customer requests. Through this, it becomes clear that the success of supply chain management requires the integration of all areas of the chain from suppliers, factories, warehouses, distributors, and retail outlets, as well as Cooperation, planning, and coordination with partners in the supply chain to achieve the effectiveness of supply chain operations (Delic & Eysers, 2020:5).

Second: Product Quality

1. The concept of product quality

Quality as a term is a word derived from the Latin word "Qualities," which means the degree of suitability and safety of something, and it is a relative concept that differs according to the view of it and the party benefiting from it, whether (the organization, the supplier, the customer, the community). Quality is one of the modern administrative concepts that focus on information, ideas, and principles that any organization can adopt to achieve better performance. Quality is a method of leadership and operation to achieve continuous improvement in performance in the long term by focusing on the requirements of customer expectations (Al-Mahyaw and Aref, 2020: 4). It was defined by (Salman, 2018: 55) as the ability of the product to perform its function, which includes durability, reliability, accuracy, ease of use and other characteristics of the product, while (3: Youkabed, 2020) explained it as the ability to meet the needs of the customer and reduce the defects that appear when using the product. Product quality can be described as the extent to which the product meets the customer's needs according to the approved approach in product design.

2. The importance of product quality

The importance of product quality stems from the extent to which organizations, with their different goals, are keen to provide a high-quality product, and the following complements its significance (Heizer et al., 2017: 229):

- A. The importance of product quality is one of the most important tools for determining the main positions of the product being marketed
- B. The direct positive impact of customer satisfaction
- C. It affects the organization's reputation, whether good or bad. The organization can visualize this through the expected visions of the new high-quality products that it produces and that are free of defects.
- D. Product quality reduces costs because the high-quality product is then produced in a way that does not contain errors such as those that occur in work and contributes to achieving financial returns
- E. Matching the product's characteristics with customer expectations and matching the design and operation of the processes that produce the products and that customer desires are considered when designing the products.

3. Product quality objectives

Product quality aims to enhance the organization's ability to survive, continue, and compete by increasing production and profits and increasing product market share. This means growing profits to satisfy the needs and desires of the customer and meet them according to the specified specifications, and understanding the customer's wishes and needs to achieve what he aspires to achieve in terms of product quality and trying to anticipate those needs in the future. Through the continuous development and improvement of products, the organization can produce products as well as adapt to economic, technological, and social changes in a way that serves to achieve the specified quality level (Kazem, 2021: 124).

Third: Manufacturing Performance

1. The concept of manufacturing performance

In general, it is one of the important topics that studyrs are interested in (Performance). Performance is considered, as it represents the important factors that affect

organizations, and it is also an important indicator that reflects the organization's ability and degree of success in investing its available material, human, technical, and informational resources according to the change and nature of organizational goals and the different goals of the parties concerned. The search for performance and its measurement faces many challenges, including differences in concepts and measures, which means that it is necessary to identify the appropriate measures that can be used to measure performance, the sources of information used in measurement, and how to integrate different measurements to provide an accurate picture of the performance of organizations (Khan et al., 2018: 3). (Singh et al., 2018: 3) defined manufacturing performance as an aspect of the way organizations benefit from tangible and intangible resources to achieve their goals. (Al-Murshid, 179: 2019) described it as the final result of all the operations carried out by the organization. Any defect in any of them must affect the performance, which is the mirror of the organization, as described by (Sawaeen & Ali, 2020: 372) as a joint system for the organization's outputs in light of its interaction with the external and internal environment, while (Raouf, 393: 2021) indicated that it is the set of financial and non-financial indicators that provide information about the degree of achievement of goals and results. It is clear from the above that manufacturing performance produces the least waste and damage and the most significant possible productivity at the right time.

2. Manufacturing performance objectives

Some objectives that manufacturing performance can achieve have been identified as follows (Khaled and Younis, 2017: 419):

- A. Determining the responsibility of each part of the organization and determining its achievements, negatively and positively, which generates competition between departments and raises their level of performance, as well as determining the extent to which available resources are used in a rational manner that achieves a more significant return at lower costs with good quality.
- B. Knowing the level of the organization's achievement of the functions assigned to it compared to the functions included in its production plan, in addition to knowing the locations of the defects and weaknesses in the organization's activity and working to avoid them by developing appropriate solutions for them after analyzing them and understanding their causes.
- C. Providing the best information that can be used in following up and developing the administrative, economic, and financial requirements of various economic units and activating the supervisory bodies on the performance of their workers, as well as increasing performance in banking organizations through the use of automated equipment and improving and training subordinates.
- D. Reducing the costs of resources through the optimal use of them. In addition, manufacturing performance is achieved by achieving development goals and preserving capital from loss and erosion by increasing and maintaining profits.
- E. Creating an enormous information base used in drawing up balanced and motivating scientific policies and plans, in addition to giving a clear picture to senior management, which enables them to conduct a review.

3. Factors that support manufacturing performance

The factors that support performance can be summarized as follows (Abu Alim, 2014: 29-30)

- A. It is very important for the organization to find the means that enable employees to achieve confidence in working alone without support from anyone.
- B. The organization must understand what is required of employees specifically for performance to be dynamic and effective.
- C. Competent managers must set clear goals so that employees know the potential in their jobs. Managers must also care about what employees say and help them exchange experiences and ideas through skills. Administrators must help employees learn by guiding them and providing new experiences that increase their expertise.
- D. Managers have the responsibility to lead both those who report to them and those who occupy important positions that impact their performance to ensure that each individual works as a source of energy and not as a consumer of the power of others.

Section Three / Practical Aspect

First: Presentation and Analysis of the Questionnaire Results

1. Displaying the results of the Sample Individuals' Responses to the Supply Chain Management Variable

The paragraph reviewed the levels of supply chain management, and Table (2) shows a general arithmetic mean of (53.85), which is a good value for the supply chain management variable, with little dispersion in the answers, as the standard deviation and coefficient of variation reached (.573) and (14.86%) respectively. This result indicates that most of the sample individuals agreed on the existence of supply chain management. As for the paragraphs, paragraph No. (4) achieved the highest arithmetic mean, which reached (4.072) (The company works to determine the future expectations of its customers.) and with average consistency in the answers, as the standard deviation and coefficient of variation reached (0.855) and (20.99%) respectively. Paragraph (6) (The company exchanges information related to the markets with its partners) achieved the lowest arithmetic mean, which reached (3.556), with average consistency in the answers, as it reached The standard deviation and coefficient of variation are (0.893) and (22.25%) respectively.

Table (2) Descriptive statistics for the supply chain management variable

No.	items	mean	St.dev	c.v
1	The company's management works to build long-term relationships with suppliers.	3.754	.756	20.13
2	The company's management informs its suppliers about its future business plans.	4.036	.802	19.87
3	The company's management responds to its customers on an ongoing basis.	3.746	.923	24.63
4	The company works to determine its customers' future expectations.	4.072	.855	20.99

5	The company's management informs its partners of its changing needs in advance.	3.883	.864	22.25
6	The company exchanges information related to markets with its partners.	3.556	.893	25.16
7	The company and its partners exchange information on time.	4.044	.837	20.68
8	The company is interested in reducing wasted time in its production processes.	3.757	.894	23.76
Total Supply Chain Management		3.855	.573	14.86

2. Displaying the results of the sample members' responses to the product quality variable

Table (3) shows the arithmetic mean for the product quality index dimension (7453.), which is a good value and is higher than the standard mean, with little dispersion, as the standard deviation and coefficient of variation reached (6830.) and (18.23%) respectively. As for the paragraphs, paragraph No. (16) achieved the highest arithmetic mean, as it reached (4.063) (customers repeatedly purchase products because of the credibility of the company's dealings with them) and with average consistency in the answers, as the standard deviation and coefficient of variation reached (0.841) and (20.69%) respectively. Paragraph (9) (purchasing workers are trained to ensure the quality of materials supplied to production processes) achieved the lowest arithmetic mean, as it reached (3.455) with average consistency in the answers, as the standard deviation and coefficient of variation reached (0.785) and (22.72%) respectively.

Table (3) Descriptive statistics for the product quality variable

No.	Items	mean	St.dev	c.v
9	Purchasing personnel are trained to ensure the quality of materials supplied to production processes.	3.455	0.785	22.72
10	Our manufacturing specifications are developed in light of our work experience.	4.043	0.562	13.90
11	Our products have been used for a long time.	3.755	1.042	27.77
12	Training programs are developed to ensure high conformity and thus improve product quality.	3.683	0.896	24.32
13	Clear policies are adopted to make the product conform to the specified specifications.	3.642	1.007	27.64
14	Training provides more excellent skills and the ability to detect defects in products.	3.895	0.894	22.75
15	Attractive advertisements are designed to enhance customer perceptions.	3.646	1.012	27.72
16	Customers repeat purchases of products because of the credibility of the company's dealings with them.	4.063	0.841	20.69
Total Product Quality		3.745	.683	18.23

3. Displaying the results of the sample members' responses to the manufacturing performance variable

Table (4) shows the arithmetic mean for the manufacturing performance index dimension (3.773), which is a good value with little dispersion, as the standard deviation and

coefficient of variation reached (6370.) and (16.88%) respectively. As for the paragraphs, paragraph (19) achieved the highest arithmetic mean, as they reached (9143.) (The management is keen to reduce waste in production). With average consistency in the answers, the standard deviation and coefficient of variation reached (1.162) and (29.68%) respectively. Paragraph (18) (The company uses mechanization in production processes) achieved the lowest arithmetic mean, as it reached (2.434) with average consistency in the answers, as the standard deviation and coefficient of variation reached (1.081) and (44.41%) respectively.

Table (4) Descriptive statistics for the manufacturing performance variable

No.	Items	mean	St.dev	c.v
17	The company's management is keen to provide products with high efficiency.	3.153	1.0121	32.09
18	The company uses mechanization in production processes.	2.434	1.081	44.41
19	The management is keen to reduce waste in production.	3.914	1.162	29.68
20	The company's management is keen to continuously improve the quality of the products provided.	3.546	1.033	29.13
21	The company is committed to improving productivity from one year to the next.	3.034	0.784	24.13
22	The factory management is keen to perform periodic maintenance of the machines.	3.853	0.930	24.13
23	The company's management works to dispose of waste in ways that do not cause harm to the environment.	3.263	1.003	30.73
Total Manufacturing Performance		3.773	0.637	16.88

second: Testing the influence of relationships

1. Testing the first main hypothesis

To test the hypothesis that states the following (there is a significant impact of supply chain management on product quality), the analysis will be done according to the simple linear regression equation as follows:

$$Y = 1.242 + 0.486 (X)$$

The calculated value of (F) between supply chain management and product quality was (73.633). It is greater than the tabular value, which reached (6.30) at a statistical level of (0.01). Based on it, the alternative hypothesis is accepted, which states (that there is a significant effect of the supply chain management variable on product quality) at a statistical level of (1%), and through the value of the coefficient of determination (R^2) of (0.344), it is clear that supply chain management explains (34%) of the variables that affect product quality. It is evident through the value of the slope (β) of (0.485) that increasing supply chain management by one unit will lead to an increase in product quality by (48%). The constant (a) value in the equation reached (1.241), meaning that when supply chain management is zero, the product quality will remain at that value, as in Table.(5)

Table (5) Analysis of the dimensions of supply chain management and product quality

Ind. variable	Dep. Variable	(a)	(β)	(R^2)	(F)	Sig
Supply Chain Management	Y2 Product Quality	1.241	0.485	0.344	73.633	0.000

2. Testing the second main hypothesis

To test the hypothesis that states the following (there is a significant effect of supply chain management on manufacturing performance), the analysis will be done according to the simple linear regression equation as follows:

$$Y = 1.563 - 0.535 (X)$$

The calculated (F) value between supply chain management and manufacturing performance was (71.643). It is greater than the tabular value that reached (6.30) at a statistical level of (0.01). Based on it, the alternative hypothesis that states (there is a significant effect of supply chain management on manufacturing performance) is accepted at a statistical level of (1%), and through the value of the coefficient of determination (R^2) of (0.375) it becomes clear that the supply chain management dimension explains (37%) of the variables that affect manufacturing performance. It becomes clear through the value of the slope (β) of (0.535) that increasing the supply chain management dimension by one unit will lead to an increase in manufacturing performance by (53%). The value of the constant (a) in the equation (1.563) is equal to, meaning that when the supply chain management dimension is zero, the manufacturing performance will remain at that value, as shown in Table.(6)

Table (6) Analysis of supply chain management dimensions and manufacturing performance

Ind. Variable	Dep. Variable	(a)	(β)	(R^2)	(F)	Sig
Supply Chain Management	Y2 Manufacturing Performance	1.563	0.535	0.375	71.643	0.000

Section Four / Conclusions and Recommendations

First: Conclusions

1. It was concluded that the General Company for Leather Industries is interested in supply chain management and that the company seeks to improve its future strategies

by identifying the future expectations of its customers, which helps in better meeting their needs and developing its products or services in line with market trends.

2. The company's management works to exchange information related to markets with partners, which reflects the company's commitment to enhancing Cooperation and effective partnership, which can contribute to improving marketing and sales strategies.
3. It was found that the company's management seeks to improve product quality by training employees and dealing honestly with customers
4. The study concluded that the company's management seeks to continuously improve manufacturing performance by reducing waste in production, which indicates the company's interest in efficiency and effectiveness in its operations, which can contribute to reducing costs and increasing profitability. Using mechanization in production processes reflects the company's commitment to benefit from modern technology to improve production efficiency and increase production capacity.
5. The results revealed that supply chain management affects product quality and manufacturing performance in the General Company for Leather Industries.

Second: Recommendations

1. It is essential for the company to invest in advanced graphic analysis tools to understand future customer trends better and enhance communication with customers to obtain their feedback and opinions, which can provide valuable insights to improve products. The company should look for opportunities to develop new strategic partnerships with other companies in the same or integrated sectors to strengthen information exchange and enhance marketing strategies.
2. Hold joint workshops: Organizing periodic seminars or meetings with partners to exchange knowledge and best practices can enhance Cooperation and strengthen stakeholder relationships. Enhancing transparency by sharing data and market study with partners can improve the effectiveness of joint strategies and achieve better results.
3. The company should invest in employee training programs to enhance their skills and knowledge of production processes and modern technologies. It is essential to conduct periodic assessments of product quality and work practices to ensure their commitment to the highest standards, achieve customer satisfaction, and improve the customer

service system to ensure that dealing with credibility and professionalism can enhance customer trust and loyalty.

4. Conduct regular analyses to identify the causes of waste in production and implement corrective strategies to reduce them and invest more resources in advanced technology and mechanization to improve production efficiency and increase production capacity and ensure the implementation of periodic maintenance programs for equipment to reduce breakdowns and improve the overall performance of manufacturing operations.
5. Improve coordination with suppliers to improve the timing of supply and the quality of raw materials, which positively reflects on the quality of the final product and manufacturing performance, and implement advanced supply chain management systems to monitor and improve all stages of the supply chain efficiently and periodic assessments of supply chain performance to identify areas that need improvement and take the necessary measures to ensure the effectiveness and quality of operations.

References:

1. Abu Aleem, Talib Muhammad, (2014) The impact of administrative empowerment on organizational performance in private hospitals in Amman, Master's thesis in Business Administration, College of Business, Middle East University.
2. Aguilera R. V., Talaulicar T., Chung C.N., Jimenez G., and Goel S., (2016), "Cross-national perspectives on ownership and governance in family firms," *Corporate Governance: An International Review*, Vol. 23 No. 3
3. Al-Muhyawi, Qasim Nayef Alwan and Aref, Rana Khaled, (2024), The impact of lean maintenance on improving product quality, a survey study in pharmaceutical companies, *Warith Scientific Journal*, 2024, Volume 6, Issue 17, pp. 1-14.
4. Al-Murshid, Muhammad Nassar, (2019), The Relationship of Strategic Thinking to Organizational Performance: A Field Study on Jordanian Insurance Companies, *Journal of the Islamic University for Economic and Administrative Studies*, Volume 27, Issue 4, pp. 173-199.
5. Al-Moussawi, Saba Talib Wahab, (2018), The role of recruitment strategy in improving the organizational performance of private hospitals, *Journal of the Islamic University College*, Issue 6.
5. Al-Qaraghoul, Dunya Abdullah, (2021), The impact of cleaner production strategies on product quality, an analytical study in the General Company for Food Products / Al-Mamoun Factory, unpublished master's thesis, Middle Technical University, Technical Administrative College.
6. Al-Shboul, M. D. A. (2017) 'Infrastructure framework and manufacturing supply chain agility: the role of delivery dependability and time to market, *Supply Chain Management: An International Journal*, 22(2), 172-185
7. Delic, M., & Eyers, D. R., (2020), The effect of additive manufacturing adoption on supply chain flexibility and performance: An empirical analysis from the automotive industry, *International Journal of Production Economics*,
8. Frazzon, E. M., Rodriguez, C. M. T., Pereira, M. M., Pires, M. C., & Uhlmann (2019) 'Towards supply chain management 4.0. *Brazilian Journal of Operations & Production Management*, Vol 16, no2, pp.180-191.
9. Heizer, Jay & Render, Barry, (2017), *Operations Management*, 12th ed 'Pearson Prentice Hall, U.S.A.
10. Jassim, Majid Joda, (2010), Supply chain strategies and their impact on achieving competitive advantage (a case study in the Diwaniyah textile factory), *Al-Qadisiyah Journal of Administrative and Economic Sciences*, Volume 12, Issue 2, pp. 41-61.
11. Kazem, Amer Abdul Latif, (2021), The impact of developing or replacing equipment on achieving product quality, an analytical study in the General Company for Food Products/Al-Mamoun Factory, *Journal of Financial and Accounting Sciences*, Issue 100, pp. 152-174.

12. Khaled, Ayad and Younis, Zainab, 2017, Achieving organizational performance according to human resources management, a survey study on a sample of private banks, Dinars Journal, Issue 6, pp. 401-443.
13. Khan, Haroon ur Rashid & Ali, Murad & Olya, Hossein G. T. & Zulqarnain, Muhamamd & Khan, Zubair Rashid, (2018), Transformational leadership, corporate social responsibility, organizational innovation, and organizational performance: Symmetrical and asymmetrical analytical approaches
14. Krajewski, Lee J, Ritzman, Larry P. and Malhotra, Manoj K., (2013), "Operations Management: processes and supply chains," 10th ed., Prentice-Hall, New Jersey.
15. Krajewski, J., Malhotra, M., Ritzman, L., (2016), "Book Management Processes and supply chains", 11th ed, Global Edition. Copyright Licensing Agency Ltd, Saffron House–Kirby Street, London EC1N 8TS.
16. Mutuerandu, Makena Naomi, (2014), Impact of Supply Chain Management Practices on Organizational Performance: A Case Study of Haco Industries Limited (Kenya), Journal of Business and Management, Volume. 16, Issue. 4.
17. Raouf Muhammad Imad (2020) "The impact of organizational culture on the organizational performance of educational institutions, the University of Technology as a model." Journal of Economics and Administrative Sciences, Volume (27), Issue (125), College of Administration and Economics, University of Baghdad.
18. Sawaeen, Fahad Awad Aber & Ali, Khairul Anuar Mohd, (2020), The impact of entrepreneurial leadership and learning orientation on organizational performance of SMEs: The mediating role of innovation capacity, Management Science Letters 10, pp.369–380
19. Singh, Sanjay Kumar & Gupta, Shivam & Busso, Donatella & Kamboj, Shampy, (2018), Top management knowledge value, knowledge sharing practices, open innovation and organizational performance, Journal of Business Research Heizer, J., & Render, B., & Mason, C., (2017), Operations management, sustainability and supply chain management, twelfth edition, Pearson Education Inc., USA.
20. Stevenson, W., J., (2012), "Book Operations Management," 11th ed, Published by McGraw-Hill/Irwin.
21. Tanco M, Jurburg D., & Escuder M., (2015), "Main difficulties hindering supply chain performance: an exploratory analysis at Uruguayan SMEs," Supply Chain Management: An International Journal, 20(1).
22. Yizengaw, Dinberu Yibeltal, 2016, Supply Chain Management Practices and Performance of Ethiopian Public Merchandise Business Enterprise (The case of Ethiopian Industrial Inputs Development Enterprise), Research project Presented for Partial Fulfillment of Executive Master of Business Administration (EMBA), Addis Ababa University.

Appendix

First: supply chain management variable

No.	items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	The company's management works to build long-term relationships with suppliers.					
2	The company's management informs its suppliers about its future business plans.					
3	The company's management responds to its customers on an ongoing basis.					
4	The company works to determine its customers' future expectations.					
5	The company's management informs its partners of its changing needs in advance.					
6	The company exchanges information related to markets with its partners.					
7	The company and its partners exchange information on time.					
8	The company is interested in reducing wasted time in its production processes.					

Second: the product quality variable

No.	Items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
9	Purchasing personnel are trained to ensure the quality of materials supplied to production processes.					
10	Our manufacturing specifications are developed in light of our work experience.					
11	Our products have been used for a long time.					
12	Training programs are developed to ensure high conformity and thus improve product quality.					
13	Clear policies are adopted to make the product conform to the specified specifications.					

14	Training provides more excellent skills and the ability to detect defects in products.					
15	Attractive advertisements are designed to enhance customer perceptions.					
16	Customers repeat purchases of products because of the credibility of the company's dealings with them.					

Third: manufacturing performance variable

No.	Items	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
17	The company's management is keen to provide products with high efficiency.					
18	The company uses mechanization in production processes.					
19	The management is keen to reduce waste in production.					
20	The company's management is keen to continuously improve the quality of the products provided.					
21	The company is committed to improving productivity from one year to the next.					
22	The factory management is keen to perform periodic maintenance of the machines.					
23	The company's management works to dispose of waste in ways that do not cause harm to the environment.					