

The activities of the Electronic Supply chain and its impact on Lean Management - A survey study in the General Company for the Manufacture of Home Furniture – Mosul

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Abstract. This research sought to identify the correlation and influence between the activities of the electronic supply chain and the Lean management of the State Company for Home Furniture Industry - Mosul. To achieve this, a hypothetical chart including research variables as well as a number of main and sub-hypotheses has been prepared. In general, the research attempted to answer the following question: What is the nature of the correlations and influence between the activities of the electronic supply chain and Lean management in the researched organization? The research reached a number of conclusions, the most important of which are:

1. There was a significant correlation between the activities of the electronic supply chain and the Lean management in the researched organization. 2. There was a significant impact of the electronic supply chain activities on the Lean management in the researched organization. Based on this, the researchers made a set of recommendations consistent with these conclusions.

Keywords: Electronic Supply Chain, Lean Management.

1 Introduction

In the midst of technological developments in the world today, organizations had to use these developments to face the challenges they face, especially with regard to the issue of waste in order to survive and grow in the business world.

Based on the relative importance of the electronic supply chain and Lean management, the present research sought to provide a theoretical and field framework and within a comprehensive framework to indicate the nature of the relationship and the impact of the activities of the electronic supply chain in Lean management by describing and diagnosing their variables to the results and analysis and then build conclusions and make proposals with Mechanisms implemented by the researched organization. The research included the following topics: The first topic: Research methodology. The second topic: the theoretical aspect. The third topic: the field. The fourth topic: Conclusions, proposals and mechanisms for their implementation.

2 Research Methodology

This paper deals with the methodology used in the research according to the following axes:

First: Research Problem: The electronic supply chain is one of the applications that proved day by day that it is the best solution to the problems faced by many organizations with regard to high costs, complexity, and high waste in the work and activities performed by the organization. Household furniture - Mosul for the period from (22/7/2019) to (26/9/2019) and interviewing some managers where it was shown their limited knowledge of the nature of correlations and influence between the activities of the electronic supply chain and Lean management, which motivated researchers to address this topic. In general, the problem of research can be identified by asking the following question:

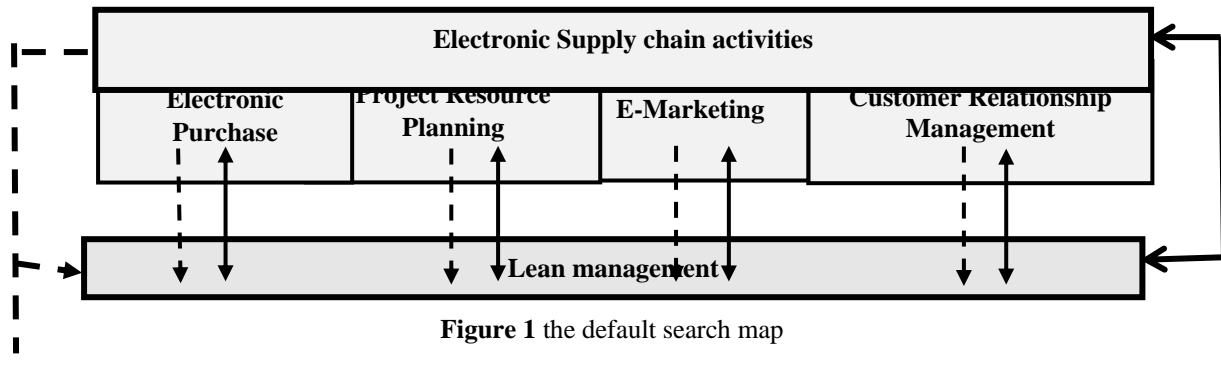
What is the nature of the correlation and influence between the activities of the electronic supply chain and the Lean management of the researched organization?

Second: Research Objectives: The present research seeks to achieve the following:

1. Increase the theoretical and field knowledge of managers in the organization researched on the electronic supply chain and Lean management.

2. Determine the nature of the correlation and influence relationships between the activities of the electronic supply chain and the Lean management in the researched organization.

Third: the default search model: Figure (1) reflects the default search model.



Source by researchers

- ↔ Refers to a correlation relationship
- ← - - - Refers to an effect relationship

Fourth: Research Hypotheses

The first main hypothesis: There is a significant correlation between the activities of the electronic supply chain combined and the Lean management in the researched organization. The following sub-hypothesis emerged: There is a significant correlation between each activity of the individual electronic supply chain and the Lean management of the researched organization.

The second main hypothesis: There is a significant impact of the activities of the electronic supply chain combined in the Lean management in the researched organization. The following sub-hypothesis emerged: There is a significant significance for each activity of the electronic Supply chain alone in the Lean management of the researched organization.

Fifth: Research Methodology:

The researchers relied on the descriptive and analytical approaches in describing the research community and sample, as well as studying and analyzing the correlation and influence relationships between the research variables to reach conclusions and make recommendations.

Sixth: Limits of Research:

1. Spatial Boundaries: The research was limited to the General Company for Home Furniture Industry - Mosul, for the cooperation of the organization's management with researchers.

2. Time Limits: The duration of the research was determined by the duration of the research and interviews conducted by the researchers in addition to the distribution of questionnaire forms to the individuals interviewed and received from them until the completion of the research and this period lasted from (22/7/2019) to (25/9/2019).

Seventh: Methods of collecting data and information: Researchers in the collection of data and information that helped them in writing the theoretical and field and access to the results and conclusions of the research on the following methods:

1. Using some Arab and foreign sources, as well as periodicals, theses, university theses and researches from the internet that are related to the subject of research to cover the theoretical aspect of research and support the field side.

2. Questionnaire Form (* Model questionnaire form in Appendix (1)): The researchers used the questionnaire as the main tool for obtaining data and information related to the field. The statements related to the activities of the electronic Supply chain were prepared based on the opinions and studies of some writers, including: [1], [2], [3], [4]. While the phrases related to Lean management were prepared based on the opinions and studies of some writers, including [5], [6], [7].

Eighth: The statistical methods used: The researchers used the following statistical methods in describing the subjects and determining the correlation and influence between the research variables in order to extract the results (iterations and percentages, simple and multiple correlation coefficients, R2 coefficient, simple and multiple linear regression, F test, T-test).

Ninth: resolution test: To determine the validity of the scale and the resolution of the resolution was used (ALPha-Cronback) The value of the coefficient of the scale mentioned (0.786), a significant value at the level of significance (0.05) this result indicates the strength of the resolution used [8].

3 The Theoretical Aspect

This topic includes the following topics:

First: electronic processing series: It includes the following paragraphs:

The concept of the electronic supply chain: [9] pointed out that it is a series of operations involving the company and its main partners, which was able to integrate and integrate all the activities and functions of the supply chain and was able to address most of the problems and obstacles facing the company in the completion The functions of the chain by providing solutions using information and communication technology that contributed to the planning of operations and achieve the objectives of the company and the exchange of information related to the entire processing chain. [1] stated that it is the process of developing and implementing information technology specifically to support supply chain management efforts, and requires changes in supply chain processes, as well as changes in the flow of information, and the way employees perform their business based on the technology used. [2] described the use of web technologies in supply chain management activities, which reflect the degree of integration of Internet technologies with supply chain activities, reflecting the efforts of companies to take advantage of the potential of recent advances in SCM communications technologies and related activities Strategies. He identified it [10] as one of the supply chain work areas that are associated with the use of the Internet and various information systems in supply chain operations to maximize automation and simplify processes through the use of computer networks for this purpose. [3] as a new dimension derived from the concept of the previous supply chain management and developed as a result of the evolution of information technology, which has transformed all traditional methods and processes in the management of the supply chain to automatic or electronic technologies in addition to re-engineering business processes Organizations towards Internet-enabled partner collaboration. [4] added that as a result of synergy between SCM technologies and IT, it is an emerging business strategy that integrates e-commerce into the physical supply chain to accelerate information exchange, reduce transaction costs, simplify the manufacturing process and better meet customer needs.

Consistent with the above, researchers believe that the electronic supply chain refers to the use of ICT and web technologies in the implementation of the activities of the processing chain, which complement each other in order to achieve added value.

Second: Benefits of the electronic processing chain: The effective application of the electronic supply chain achieves a number of benefits, the most important of which are: [11], [1].

- 1.Reduces inventory and work by reducing waste and variable costs through Lean manufacturing systems.
- 2.Reduce fixed costs through advanced planning and scheduling systems and improve equipment and facilities through logistics/operations scheduling systems.
- 3.Increase in productivity and decrease the cost of handling materials through automatic processing of materials.
- 4.Manage remote facilities more effectively by combining all functions of the organization.
- 5.Reduce investment in expensive routine procurement transactions through e-procurement approval.
- 6.Increase the speed and accuracy of data transfer through electronic data exchange.
- 7.Allows data sharing across the company through the Enterprise Resource Planning (ERP) system.
- 8.Strengthen the relationship between FAO, suppliers, partners and clients in the information workshop
- 9.Improving the quality of products and services through quality management systems.

Third: Supply chain activities: The views presented on the activities of the e-supply chain differed in their emphasis on some activities but not others, but most of the authors [12], [13], [14] agreed that Processing (e-procurement, project resource planning, e-marketing, customer relationship management). The following is a brief explanation of each activity:

1- E-Procurement: [9] indicated that e-procurement is a technical solution that facilitates and supports organizations' procurement of materials that they need online [15] stated that it is a way in which goods and services of the organization can be purchased online and can oversee the flow of goods and services in the business. With regard to the benefits of e-procurement [16]:

- A. Cost savings and subsequent increase in return on investment.
- B. Increase the productivity of the store network by providing continuous information regarding access to items, stock level, shipping status, etc.
- C. It provides better control.
- D. Abolition of direct human interaction in the auction, and achieve an increase in internal efficiency.
- E. Improving communication and cooperation with suppliers.

2- Enterprise Resource Planning (ERP): [17] noted that ERP is a business management system consisting of a set of programs that integrate all business functions and manage them within the organization. [18] stated that it is an integrated software package consisting of a set of standard functional units such as production, sales, human resources, finance, etc., and can be adapted to the specific needs of each organization. Regarding the benefits of the project planning system [19], he showed the following benefits:

- A. Operational Benefits: Cost, performance, quality and cycle time can be utilized through ERP. Interaction between different business functions and information can be improved, information quality can be increased, and the time taken to complete tasks can be greatly reduced.
- B. Intangible benefits: The implementation of the ERP system increases flexibility, better customer satisfaction, improved resource utilization, improved accuracy and better decision-making.
- C. Administrative Benefits: Planning and decision-making by managers can be improved through ERP systems.
- D. Benefits of IT Infrastructure: If any changes occur in the current or future scenario, the ERP system can provide flexibility for its budget.
- E. Organizational Benefits: The ERP system can effectively achieve a common vision and idea for employee empowerment.

3- E-Marketing: [20] pointed out that e-marketing is a new approach and modern realistic participation in the marketing of goods, services, information and even ideas online and other electronic media. [21] stated that he concentrated all efforts in terms of adapting and developing marketing strategies in virtual spaces such as the web, social media... etc in the e-commerce site in order to help consumers buy them. He explained [22] that Internet technology can be used to support the objectives of e-marketing as follows:

- A. Definition: The Internet is used in marketing research to know the needs and desires of customers.
- B. Expectation: The Internet provides an additional channel through which customers can access information and make purchases.
- C. One of the key success factors in e-marketing is to achieve customer satisfaction through the electronic channel.

4- Customer Relationship Management (CRM): [23] pointed out that customer relationship management is a business approach that seeks to establish, develop and strengthen relationships with targeted customers carefully in order to improve customer value and corporate profitability and thus maximize shareholder value. [24] stated that it is an interactive process aimed at optimizing the balance between organizations' investments and meeting the needs of customers to achieve the main objective of CRM is to create value. The value should be created on both sides: by the company and by the customer. Regarding the benefits of customer relationship management [25] stated that it achieves the following benefits:

- A. Identify the organization's customers quickly, meet their basic needs, and then recommend additional products or services compatible with their profiles.
- B. Enhances the organization's ability to interact, attract and build relationships and the ability to acquire customer knowledge.
- C. CRM helps to add a personal touch to the current relationships between the company and customers.
- D. Helps in dealing with each customer individually and not as a group, by maintaining a repository on the profiles of each customer.
- E. This system allows each employee to understand the specific needs of customers.

Second Topic: Lean management

First: This topic includes the following paragraphs:

The concept of Lean management [26] noted that Lean management is an approach to operations management which considers that any resource spent does not add value to the end customer is waste. He mentioned [6] as an administrative philosophy whose main idea is to increase customer value while minimizing waste in all its forms in all activities and operations of the organization. He explained [27] that it is the basic philosophy that emerged as part of the Toyota production system and that the main key in Lean management is to identify activities that add no value to the system or product and get rid of these unnecessary activities for the purpose of reducing cost and improving performance, as these non-value activities are activities that the customer will not be willing to pay for. He added [7] as a process that seeks to improve productivity by reducing material waste and time, improving communication, and saving costs. Consistent with the above, researchers argue that Lean management is the process of discovering and identifying all processes and activities carried out by the organization that does not add value to the work and customer and seeks to remove them in order to increase value and improve performance in all practices of the organization.

Second: The importance and benefits of Lean management: The importance of Lean management is highlighted by the assumption that teamwork is the foundation of the organization's success. Moreover, eliminating waste can reduce costs, make better use of resources and provide better value for customers [28]. The main benefits of Lean management can be summarized as follows: [29], [5].

1. Eliminate waste during the implementation of the organization's tasks, ie eliminating all types of activities and processes that do not add value to the product and process.
2. The implementation of Lean management leads to the increased speed of completion of tasks.
3. Creating an organizational culture based on continuous improvement.
4. Implementing Lean management dramatically reduces waiting time.
5. Improve relationships with vendors and improve customer satisfaction.

6. The implementation of Lean management enables companies to retain experienced and skilled workers.
7. Enables Lean management systems to meet all cost reduction objectives.
8. Provide better service to customers.
9. Increase the competitiveness of companies.

Third: Types of waste addressed by Lean management: Muda is a Japanese word for waste, which refers to any activity that requires specialized resources but does not add value. Toyota CEO Taiichi Ohno has introduced the Muda concept to denote all activities that require resources but do not add value to the product or process, and customers are not willing to pay for them and are therefore wasted [30]. [31], [32], [33] agreed that there are eight types of waste that negatively affect the performance of the activities of organizations that the Lean management is working to address:

1- Overproduction: the production of too many goods at a given time, ie, the production of items without actual orders, which leads to an increase in inventory, which in turn needs to increase the number of workers and storage space, as well as transport.

2- Waiting: is a waste of time and is represented by the time in which the process or activity is waiting to complete another process, and occurs in different ways because of the performance of workers (inactive workers) or lack of knowledge of work or lack of inventory ... and others.

3- Unnecessary transport: is the transfer of products over long distances, unnecessary transport is a waste of time and effort.

4- Surplus stock: means that the levels of inventory is very high, and is represented by material in excess of the actual need.

5- Over-treatment: Working on an activity or product more than its actual requirements is known as over-treatment. Over-treatment may be caused by improper tools or inappropriate procedures. Excessive treatment is a waste of time.

6- Unnecessary movement: It means the lack of movement of people and equipment between tasks efficiently, any excessive movement by workers is wasted, such as movement during the search for tools.

7- Disadvantages: Parts that do not meet the quality or do not meet the specifications required by customers is a waste, repairing defective parts or replaced because of poor quality is a waste of time and effort.

8- Unused creativity of workers: means not to use the workforce efficiently, lack of benefit from the ideas, skills and improvements presented by workers in the work is a waste.

Fourth: Principles of Lean Management: the main principles of Lean management are as follows: [34].

1. Value Specifications: Determine precisely what creates value from the customer's perspective.
2. Define Value Stream: Clearly identify all the steps in the processes (value stream) that provide exactly what adds value to the customer and remove whatever does not add value to it.
3. Flow: Take measures to ensure continuous flow in the value stream.
4. Withdrawal: This means producing and executing what the customer wants just in time.
5. Perfection: the constant pursuit of perfection by delivering what the customer wants and expects and is done by removing all kinds of waste continuously.
- 6.

4 The Practical Work

This chapter includes the following topics:

First, the organization described the study population and the rationale for its selection. Perhaps the most important justification for the selection of this organization as a field of study are the following:

1. Clarity of the research variables of most individuals in the researched organizations.
2. These organizations have administrative and technical cadres with appropriate experience and skill in their field of specialization.
3. Managers and employees of the research organizations in cooperation with researchers and assist them in responding to the questionnaire and obtain the required data and information.

Table 1 shows a simplified description of the research organizations:

Table 1. A simplified description of the organization

Name of organization	A summary of the organization	The most important
Mosul Home Furniture Industry Company	Biography The home furniture manufacturing company is one of the joint-stock companies in the mixed sector, which was established in 1986 in accordance with the provisions of the Companies Law No. (21) For the year 1997 with a capital of JD (10,000,000). In 2003, the Company's capital became (225.000.000) JD. At present, the home furniture company produces a variety of products.	In addition to the above products other products are modern design bedrooms, a two-door wardrobe, comedy, single bed, kitchen cupboard, set drums, Saj library, dining chair, dining table, and set Diwan.

Source: Prepared by researchers based on the identifiers of the researched organization.

Second: Description of the respondents: A deliberate sample of managers in the researched organization was selected from those who possess information about their organization's various tasks and activities. The researchers distributed (30) questionnaires to the respondents in their worksites in the researched organization. (30) Questionnaires were obtained for analysis, ie the response rate reached (100%). Table (2) shows the characteristics of the individuals interviewed in the organization:

Table (2) Characteristics of the individuals interviewed in the organization

Job Position									
Middle management					Senior management				
%		number			%		number		
40		12			60		18		
Academic achievement									
Master		Higher Diploma				Bachelor			
%	number	%		number		%	number		
13.33	4	20		6		66.67	20		
Years of service in the organization (year)									
21 And more		20-16		15-11		10-6		5-1	
%	number	%	number	%	number	%	العدد	%	number
23.33	7	16.67	5	33.33	10	16.67	5	10	3

Source: Table (2) prepared by researchers based on the results of the questionnaire.

Table (2) shows the job status of the respondents as it shows that the senior management of the organizations represents (60%) while the middle management constituted (40%) of the total sample. Obtain the views of managers from the upper and middle management levels. As shown in Table (2), the educational attainment of the respondents who have a good educational qualification enables them to understand the questionnaire and deal with it correctly and accurately. It is also clear that (90%) of the respondents have a service in the organization six years and more, which contributed to improving their experience and knowledge of the work of the organization and has a significant impact in dealing with the questionnaire.

Third: The correlation between the activities of the electronic supply chain and Lean management in the researched organization.

A. The relationship between the activities of the combined electronic supply chain and the Lean management in the researched organization: Table (3) presents the results of the correlations between the activities of the combined electronic supply chain and the Lean management in the researched organization.

Table 3. Results of the correlations between the activities of the electronic supply chain combined and the Lean management in the researched organization.

Independent variable	Combined electronic supply chain activities
Supported variable	
Lean management	0.875 *

Table prepared by researchers based on calculator outputs.

It is noted from the table (3) that there is a significant correlation between the requirements of talent management combined and enhances the characteristics of the learning organization combined at the level of the researched organization, where the value of the total index of the correlation coefficient (0.875 *) at the level of significance (0.05), and this is evidence of the strength of the relationship. This result indicates that the more the management of the researched organization increases its interest in the activities of the electronic supply chain combined, the stronger the Lean management. Based on the above, the first major hypothesis can be accepted at the level of the organization.

B. The correlation between each of the individual supply chain activities and the Lean management in the researched organization: Table (4) shows the correlations between each of the activities of the individual electronic supply chain and the Lean management at the level of the researched organization according to the sub-hypothesis emanating from the hypothesis. First President.

Table 4: Results of the correlations between each of the individual e-supply chain activities and Lean management in the researched organization

Independent variable	Electronic supply chain activities			
Supported variable	Electronic Purchase	Project Resource Planning	E-Marketing	Customer Relationship Management
Lean Management	0.894*	0.690*	0.828*	0.857*

Table prepared by researchers based on calculator outputs.

0.05 ≤ P* N=30

From Table (4), there is a correlation between each of the individual electronic supply chain activities and Lean management at the level of the researched agency.

1. The relationship between e-procurement and Lean management: Table (4) indicates a positive correlation between e-procurement activity as an independent variable and Lean management as an approved variable, where the value of the correlation coefficient (0.894 *) at the level of significance (0.05). The result is that the decision-making management of the organization that will increase interest in e-procurement activity will lead to more Lean management.

2. The relationship between ERP and Lean management: Table (4) indicates that there is a positive correlation between the activity of the ERP as an independent variable and Lean management as an approved variable, where the value of the correlation coefficient (0.690 *) at a significant level (0.05). This finding confirms that decision-making by FAO's management that will increase interest in project resource planning activity will enhance Lean management.

3. The relationship between e-marketing and Lean management: Table (4) indicates a positive correlation between the activity of e-marketing as an independent variable and Lean management as an approved variable, where the value of the correlation coefficient (0.828 *) at the level of significance. The result is that the decision-making management of the organization that will increase interest in e-marketing activity will lead to the promotion of Lean management.

4. Relationship between CRM and Lean Management: Table (4) indicates a positive correlation between the CRM activity as an independent variable and Lean management as an approved variable as the value of the correlation coefficient (0.894 *) at a significant level (0.05). This finding confirms that decision-making by FAO's management that will increase interest in a management activity will enhance its Lean management.

Based on the above, accept the hypothesis emanating from the first main hypothesis at the level of the researched organization.

Fourth: The Impact of Electronic Supply chain Activities on Lean Management in the Researched Organization: In order to determine the impact of the electronic supply chain activities on the Lean management in the researched organization, this axis is devoted to verifying whether the second main hypothesis and the sub-hypothesis emanating from it are approved.

A. the Impact of Electronic Supply chain Activities Combined on Lean Management: Table (5) presents the results of the impact relationships of the electronic supply chain activities combined on Lean management in the researched organization.

Table 5: Results of the impact of the e-processing activities combined on Lean management in the researched organization.

Independent	Combined electronic supply chain activities		R ²	F	
	Authorized	β_0		β_1	Calculated
Lean management	0.683	0.845 (11.832*)	0.884	147.248*	4.196

Table prepared by researchers based on calculator outputs.

() Indicates a value Calculated df (1, 28) 0.05 N = 30 * p ≤

Table (5) of the regression analysis results shows that there is a significant effect of the electronic supply chain activities combined in Lean management. The calculated value of F (147.248 *) is higher than the table value of (4.196) at the level of significance (0.05) and two degrees of freedom. (1, 28) The coefficient of determination (R²) (0.884) means that (88.4%) of the differences explained in Lean management due to the impact of the activities of the electronic supply chain combined and the rest is due to random variables that cannot be controlled or not included in the model Regression originally. By following the coefficients of the values of (β) and the test (T), it was found that the calculated value of (T) (11.832 *) is significant and greater than its tabular value of 1.697 at the level of significance (0.05) and the degree of freedom (1, 28). Consistent with the above, accept the second main hypothesis at the level of the researched organization.

B. Impact of each EEP activity on Lean management: In order to illustrate the detailed impact relationships of individual EPC activities on Lean management at the level of the researched organization, and in the light of the sub-hypothesis emanating from the second main hypothesis, Table (6) shows the impact Each activity of the electronic supply chain is individual in the Lean management of the researched organization.

Table (6) the impact of each activity of the electronic supply chain individually on the Lean management in the researched organization.

Independent variable	β_0	Combined electronic supply chain activities				R ²	F	
		Electronic Purchase	Project Resource Planning	E-Marketing	Customer Relationship Management		Calculated	Tabular
Supported variable		β_1	β_2	β_3	β_4			
Lean management	0.297	0.635 (7.431*)	0.362 (3.285*)	0.547 (4.846*)	0.621 (5.578*)	0.875	67.412*	2.758

Table prepared by researchers based on calculator outputs.

() Indicates a value Calculated df (4, 25) 0.05 N = 30 * p ≤

Table (6) shows that there is a significant effect of the electronic supply chain activities as independent variables in Lean management after which an approved variable is supported by the calculated value of F (67.412 *), which is greater than its tabular value of (2.758) at two degrees of freedom (4,25). Within a significant level (0.05). The value of the coefficient of determination R² (0.875), which means that (87.5%) of the differences in Lean management is explained by the activities of the electronic supply chain combined, and the rest is due to random variables that cannot be controlled or not included in the regression model at all. Following the values of the قيم coefficients and the T-test, it was found that there was a significant effect for each activity of the electronic supply chain alone in Lean management. The priority sequence of this effect can be found through:

1. The impact of e-procurement activity in Lean management: It is clear from the table (6) that the highest impact of e-processing activities in Lean management is in the e-procurement activity, which came in the first place in terms of impact, where the value of β_1 (0.635), while the value of T calculated (7.431 *), which is a significant value and greater than the tabular value of (1.697) at the degrees of freedom (4, 25) and the level of significance (0.05).
2. The impact of the CRM activity in Lean management: The impact of the CRM activity in Lean management came in second place in terms of impact as the value of β_4 (0.621), while the calculated value of T (5.578 *) which is a significant value and greater than its tabular value of 1.697 at freedom levels (4, 25) and a significant level (0.05).
3. The impact of e-marketing activity in Lean management: The impact of e-marketing activity in Lean management came in third place in terms of impact as the value of β_3 (0.547), while the value of T calculated

(4.846 *), which is a significant value and greater than the table value of (1.697) at two degrees of freedom (4, 25) and a significant level (0.05).

4. Impact of the ERP activity on Lean management: The impact of the ERP activity on Lean management came in the fourth place in terms of impact, with a value of β_2 (0.362), while the calculated value of T (3.285 *) is a significant value and greater than its tabular value. Of 1.697 at freedom levels (4, 25) and a significant level (0.05).

On the basis of the above, accept the hypothesis emanating from the second main hypothesis at the level of the researched organization.

4. Conclusions and Recommendations

First: Conclusions: Based on the results of the research, the researchers reached a number of conclusions:

1. Individuals with good experience and knowledge of the work of the organization, as well as most of them have a good scientific qualification that enabled them to understand the questionnaire and deal with it correctly.
2. The majority of the individuals interviewed have a service in the organization (6) years or more, which indicates their experience and maturity in the work of the organization and then deal with the questionnaire correctly and accurately.
3. A significant correlation was achieved between the activities of the electronic supply chain combined and the Lean management in the researched organization. This suggests that increased interest by the management of the researched organization in the electronic supply chain activities will contribute to enhanced Lean management.
4. A significant correlation was achieved between each of the individual electronic supply chain activities and the Lean management in the researched organization. This indicates that increased attention by the management of the researched organization to each activity of the electronic supply chain alone will contribute to the promotion of Lean management.
5. There was a significant effect of the combined electronic supply chain activities on the Lean management of the researched organization. This indicates the possibility of the combined electronic supply chain activities on the Lean management of the researched organization.
6. A significant impact was achieved for each activity of the electronic supply chain alone in the Lean management of the researched organization. The most influential activities in Lean management were e-procurement, and the least impact was on the ERP activity, as demonstrated by the results of statistical analysis.

Second: Recommendations

1. The need to increase the attention of the researched organization to the activities of the electronic supply chain by identifying strengths and addressing weaknesses in the effective application of these activities because of its significant impact in reducing waste in the organization.
2. Pay more attention to the planning of project resources through the provision of infrastructure for the application of this system and the training of staff to deal with this system.
3. The management of the organization should motivate its employees to eliminate waste of all kinds in all the work of the organization and give them encouragement prizes.
4. Form a permanent committee whose task is to search for all activities that cause waste and then remove that waste.
5. Organizing training courses for managers and workers in all disciplines in order to increase their experience and skills in the field of electronic applications and how to use them to complete the work of the organization in a more efficient manner.
6. Exchange of experiences with leading organizations in the same sector, so as to increase the knowledge of managers and staff and improve their performance and share those experiences among the rest of the workers to improve their efficiency and develop their abilities and knowledge.
7. The study of the organization of the researched organization to study and analyze the correlation and impact relations between the activities of the electronic supply chain and Lean management by identifying the relationship and the impact that link each activity of the electronic supply chain individually and Lean management and seek to make the most of the possibility of application according to their relationship and follow up on the related results. In order to achieve developments in this area.

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Appendix 1

Questionnaire form

Mr. Respondent.... Respected

Hi, The questionnaire is part of the research tagged "Electronic Processing Series Activities and Their Impact on Lean Management: An Exploratory Study of Managers' Opinions in the State Company for Home Furniture Industry - Mosul."

This form is a reliable measure for the purposes of scientific research, and your participation will have a positive impact in producing this study at the required level.

We would like to thank you for your precious time. That you have given me little to help us, I would be very grateful.

Please choose the answer that you think is appropriate for each question, note that the answer is used for scientific research purposes exclusively and without the need to mention the name.

We hope that all questions will be answered. The fact that any statement left unanswered means that the form is not valid for analysis.

We wish you always success.

Researchers

First: General Data:

1. Data about the organization or department

A. The name of the organization or department B. Type of sector, General () Mixed () Private ()

2. Data related to the questionnaire:

A. Position (B): Academic Achievement: c. Term of service in the Organization

Second: Activities of the electronic processing chain: The following activities include:

1. Electronic Purchase:

N o.	Phrases	Strongly Agreed	Agreed	Neutral	I Do Not Agree	Don't Strongly Agree
1	The management of our organization seeks to manage procurement practices by e-mail.					
2	Our organization's management focuses on the use of technology to document its transactions.					
3	The management of our organization develops its tools through the introduction of technical means such as computers.					
4	Our organization's management uses new electronic means to complete purchases such as fax and mobile.					

2. Project Resource Planning:

No.	Phrases	Strongly Agreed	Agreed	Neutral	I Do Not Agree	Don't Strongly Agree
5	Our organization's management seeks to implement programs related to the ERP system.					
6	Our management focuses on re-engineering its operations to ensure the successful implementation of the ERP system.					
7	The management of our organization provides the infrastructure and physical and human resources necessary to implement the ERP system.					
8	Our organization liaises with leading organizations in the implementation of the project planning system to benefit from their expertise in this area.					

3- E-Marketing:

No.	Phrases	Strongly Agreed	Agreed	Neutral	I Do Not Agree	Don't Strongly Agree
9	Our website provides clear and accurate information about our products.					
10	Our management seeks to benefit from the latest technological developments in the field of e-marketing.					
11	Our organization is constantly updating the information on its website.					
12	Our management aims to achieve customer satisfaction by dealing personally with every customer.					

4. Customer Relationship Management:

No.	Phrases	Strongly Agreed	Agreed	Neutral	I Do Not Agree	Don't Strongly Agree
13	Our organization is committed to continuous electronic communication with its customers to achieve excellence over its competitors.					
14	Our organization responds to customer inquiries and complaints.					
15	Our organization is keen to benefit from the ideas presented by customers to develop its products and to meet the expectations of customers.					
16	Our organization pays great attention to the security and privacy of information related to its customers.					

Third: Lean Administration:

No.	Phrases	Strongly Agreed	Agreed	Neutral	I Do Not Agree	Don't Strongly Agree
17	Our management focuses on identifying the types of waste in its activities.					
18	The management of our organization eliminates activities that do not add value to the business.					
19	Our management focuses on the principle of teamwork and team spirit.					
20	Our management is keen to empower employees and involve them in making decisions related to their work.					
21	The management of our organization communicates with the customer to provide what he needs in a timely manner.					
22	Our organization is keen to completely eliminate the paperwork in the organization.					
23	The management of our organization focuses on taking advantage of the ideas presented by employees to improve work.					
24	The management of our organization provides training courses for employees					

	to train them on how to address and remove all forms of waste at work.					
25	The management of our organization focuses on the use of modern and advanced technologies in the work.					