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Logistics Management and its Effect on the Quality of Private Development Companies' Services

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Abstract: The present study aimed to manifest the impact of strategic management on the quality of services provided in private development companies. To achieve the objectives of the study, the researcher designed a questionnaire as a tool for the study. Moreover, the study population included workers in private development companies, while the study sample consisted of (200) workers who work in private development companies. The descriptive analytical method was used. The results reflected that the levels of transport management, warehousing management and supply management in private development companies were high. It was also found that the level of quality of services provided in private development companies was high. The results revealed a statistically significant effect, at the level of significance (0.05), of the dimensions of logistic management for each dimension (transportation, storage, supply) on the quality of services provided in private development companies. The study recommended the need to pay attention to the study of logistics management and its activities because of their great importance in supporting competition and bringing about customer satisfaction. It also recommended that there should be a focus on supporting research and development to enhance the field of logistics management, due to its importance in improving the quality and efficiency of service delivery. Besides, this study suggested introducing special curricula and university majors in the field of logistics management at the local level.

Keywords: Logistics management, quality of services, private development companies.

Introduction

Logistics management is an integral part of relatively modern business management. Though logistical functions have been practiced since a long period of time, such as the function of warehouses, transportation and purchase orders, the development of modern administrative thought in this field is utterly new.It refers to the process of linking activities which are related to providing raw materials, final

goods and services needed by the organization, economic unit or various institutions, in an integrated manner which is known as integrated management (Al-Hajj, 2008).

Logistic activities in various organizations and institutions mainly aim to satisfy the beneficiary by achieving quality of the provided services. Moreover, the real interest in logistical activities had not appeared until the mid-fifties and early sixties of the last century, when its cost began to inflate significantly. Meanwhile, management realized that the way towards strengthening the competitive center and increasing the turnout begins with serving the beneficiaries with high quality (Idris, 2006). Getting access to the high quality of materials and goods is an important matter. For this reason, there must be a department concerned with purchasing, transporting, storing and supplying goods. This type of management is called logistics management, and it is one of the branches of administrative sciences that seeks to achieve coordination and integration between activities in order to provide inputs at the right time and place as well as in the required form in order to avoid problems and obstacles that prevent access to the quality of services being provided (Alwan, 2005).

Doing logistics business in an advanced, integrated and homogeneous manner can help organizations and institutions to expand in the market and increase the market share, no matter how large the volume of production is. The importance of logistical activities is embodied in the rapid response to the beneficiaries in the market despite the speed in providing goods and services that are consistent with the needs and desires of the beneficiaries. If the organization and the institution tend to ensure its success and continuity, it needs high performance compared to similar and competitive institutions and organizations in light of the effectiveness of its logistical management. Through this, it achieves what the beneficiaries need in the least time and the highest possible quality (Christian & Joel, 2000).Thus, the present study seeks to identify the logistics management and its impact on the quality of services provided by private development companies.

Problem of the Study

Logistics management has emerged as one of the modern trends of management in the face of current events and changes. It is one of the necessities which is crucial for the availability of service with the required quality, at the right time and place, and in the desired quantity in such a way that supports the management's ability to achieve the various benefits of sustainable development of private companies. That is, having access to these advantages imposes on organizations and companies in general, and on private development companies in particular, the need to follow the steps followed in modern management and its applications in terms of planning the service provided, following up its implementation, and evaluating and improving the implementation of outputs.

In order to highlight the problem, it is urging to have a look at the fact that the increase in competition between private development companies to obtain market opportunities for the beneficiary's need has become clear and in a random and unorganized way. Moreover, their traditional practices of various logistical works such as storage, transportation and supply do not guarantee continuity for these companies. Rather, they are insufficient to achieve their ambitious goals and the satisfaction of their beneficiaries, so it was necessary to adopt integrated services and homogeneous activities in logistic companies.

Therefore, the study problem can be highlighted by raising the following main question:

What is the impact of logistics management on the quality of services provided by private development companies?

Significance of the Study:

In the light of what has been stated above, the significance of the study can be divided into:

First: The Theoretical Significance:

The researcher hopes that this study will help in supporting theoretical studies and research in the field of the importance of logistic management and its impact on the quality of private development companies' services. Hence, it adds a theoretical aspect to be used by researchers in this field, which is expected to be a new title that benefits libraries as well as researchers who want to pursue their research in this field in the future. Moreover, linking the variable of logistics management with the quality of services in private development companies makes this study so significant.

Second: The Practical Significance:

The practical significance is represented by the results and recommendations of this study which, it is hoped, will provide the private development companies with notions on the importance of logistics management and its impact on ensuring the quality of services in its various departments and the success of their implementation. The researcher also hopes that the results of this study will form a basis for other future studies to be conducted on organizations, companies and service institutions working in different sectors outside the private development companies sector.

Hypotheses of the Study:

The Main Hypothesis:

There is no statistically significant effect, at the level of significance ($\alpha = 0.05$), for logistics management with its dimensions (transportation, storage, supply), on the quality of services provided by private development companies. A number of sub-hypotheses emerge from this hypothesis as follows:

- The first sub-hypothesis: There is no statistically significant effect, at the level of significance ($\alpha = 0.05$), for logistics management with its dimensions (transportation), on the quality of services provided by private development companies.

- Second sub-hypothesis: There is no statistically significant effect, at the level of significance ($\alpha = 0.05$), for logistics management with its dimensions (warehousing), on the quality of services provided by private development companies.

- The third sub-hypothesis: There is no statistically significant effect, at the level of significance ($\alpha = 0.05$), for logistics management with its dimensions (supply), on the quality of services provided by private development companies.

Procedural Definitions:

Logistics management: A series of activities and operations that take place inside and outside private development companies. It aims to plan, implement and follow up the movement of such activities' requirements from their sources to the beneficiaries, including (supply, warehousing, and transportation) and then measure them by the study tool; the questionnaire which is designed for this purpose.

Quality of services: It refers to achieving a distinguished level in the services provided by private development companies to the beneficiaries and satisfying their desires, requirements and needs. This is measured by the study tool.

Private development companies: This term refers to companies that provide services for their users and customers. In this study, the private development company in southern Jordan is targeted. By means of the study tool (the questionnaire), the impact of logistic management (warehousing, transportation, supply) on the quality of the services it provides is measured.

Delimitation of the Study:

- Place: This study includes the private development companies in southern Jordan.

- Time: This study was conducted during the second semester of the academic year 2020/2021.

- Population: The population of this study includes laborers in the private development institutions.

- Scientific limits: The study focused on measuring the independent variables (transportation, warehousing, supply) and the dependent variable (quality of services) as it is shown in the study model.

Theoretical Background

The Logistics Management:

The term "logistics" has its roots in the ancient Greek language (logistiquose), which means reflection, understanding, comprehension, accounting, and logic in thinking. There are those who believe that it is derived from the French word (logistique), which means providing accommodation (Khamis, 2014).

The concept of (logistics) has a military origin. It was first used by the French army in 1905 with the aim of ensuring the arrival of supplies and ammunition at the appropriate time and in the most optimal way possible. Then it was used extensively during World War II, and it was one of the factors that brought about the victory of the Allies. Soon after the end of the World War II, studies began to appear aiming at applying logistics in the field of business in what was known as Business Logistics. The studies conducted in this field found that about 40% (on average) of the production cost of any commodity in developed countries can be refunded to logistic activities (Al-Suhaibani, 2008).

By the beginning of the sixties of the last century, the companies realized the importance of meeting the needs of their customers and achieving their aspirations, on the one hand, and reducing costs, on the other hand, so as to build the company's competitive position, achieve quality and gain profits (Al-

Hajj, 2016).This means that the organization's achievement of the differentiation strategy is determined on the basis of the effectiveness its logistics activities concerning cost and efficiency of providing service to customers (Mustafa, 2012).Since the eighties of the last century, the organizational structures of large-sized companies have included a special section for managing logistics. Therefore, production, marketing and financing have become global, as these companies have adopted a new system for the international division of labor based on the fragmentation of the production process of commodity production between several countries, that is, a process of vertical disintegration at the industry level, then carrying out horizontal and vertical integration processes at the scientific level, in a way that ensures benefiting from the economy (Yang, et al, 2005).

Logistics Management:

Logistics management refers to logistical operations that are concerned with delivering the right materials or services to the right place, at the right time, and in the right manner, while achieving the highest return for the company (Al-Zoubi, 2012).It is also known as all activities related to the flow and manufacture of products from suppliers to the final beneficiary in addition to the fact that the flow of information takes place in both directions from suppliers to customers and vice versa. It was also explained as a complex process that requires coordination between many activities so that goods and services are shipped from the supplier to the beneficiary efficiently and effectively (Turban, 2010).Khamis (2014) defined it as an integrated management of the activities and operations of marketing, sales, manufacturing, production, financial management and information technologies. It is one of the activities and functional processes that can be repeated and reused through certain channels, during the manufacture of final products of raw materials. It focuses on creating a positive image of the tangible value of the products in the minds of customers and their desire to own and obtain them.

The Importance of Logistics Management:

The importance of logistics management lies in many things that enhance its adoption and commitment in companies in order to ensure its sustainability in the environment in which it operates. Many studies have focused on the importance of logistics management because it reflects flexibility in the face of changes that may occur in the company's environment. Moreover, such studies paid attention to the ability of organizations that work to develop logistics management to face challenges as well as their ability to modify their various activities.

Logistic activities have developed rapidly. They started with the concept of sample distribution, and then they were developed into materials management. Then they turned into integrated logistics that includes both materials management, which became known as internal logistics, and sample distribution under the name of external logistics, as well as internal handling. Moreover, logistics evolved into a supply chain, which in turn evolved to be a global supply chain. This was adopted by multinational companies and then the matter evolved to find other independent parties in the implementation of logistics activities instead of the company (Handfield & Nichols, 2008).

Dimensions of Logistics Management:

Logistics management is one of the important processes that plan, coordinate and monitor the flow of goods, services and information from the product or service source to customers and beneficiaries in

such a way to ensure the fulfillment of their requirements (Stock & Lambert, 2003). Below are the most important dimensions of logistic management:

1- Transportation:

Transportation here refers to the movement of services and products that are effectively transported to enhance the added value of the activities of logistics services, which plays an important role in transforming resources into products that are useful to the final beneficiary (Thomas &Griffink, 2005). Mustafa (2012) defined the freight broker (transportion) as the party that organizes an integrated transportation process and bears contractual responsibility throughout this process, regardless whether being the party that actually implements the transportation stages or not. The function of the transportation process lies in connecting the organization's sites and facilities with consumption sites by supplying consumption sites with specific products and supplies. The nature of this function is evident in two things (Al-Hajj, 2016):

First: The volume of expenditure costs on this process constitutes the largest proportion of the total expenditure costs in logistical activities. Moreover, it is determined by the nature of the industry, for example, transportation costs in electronic industries are low when compared to heavy industries such as iron and chemicals.

Second: The arrival of products to the right place and time contributes to generating profits for the organization and the continuity of production. Besides, it earns the loyalty and belonging of customers as a result of its ability to secure their needs and meet their requirements.

With the technological advancement that influenced transportation equipments, modes and systems, competition has become intense in this field. Its impact has exceeded competition from the circulation of goods and commodities to obtaining a percentage of the value added during the transportation process between countries.

2. Warehousing:

Warehousing refers to storing products for a period of time until they are needed and maintaining them in their condition, or exposing them to natural conditions in which a required change occurs, and making these products at the specified stage. It is one of the oldest functions known to mankind since ancient times. It represents a basic function in any company of all kinds, whether it is developmental, industrial, commercial, or agricultural. This indicates the need to pay attention to stores, whether they are raw materials stores, materials in operation, finished goods, or other tools. Hence, the importance of warehousing merges from the basic goals that this job seeks to achieve, the most important of which is to secure a balanced flow of materials, whether raw materials, semi-manufactured or ready-made. It provides the companies with their needs of maintenance and repair requirements and spare parts, and multiple goals that may unite according to the type of facility activity (Tompkins & Smith, 1998). Moreover, its importance stems from the primary role it plays, which is to store materials and products and provide them in time. It continuously supports and supplies companies with raw materials and final products, thus increasing their competitiveness until they gain the satisfaction and loyalty of customers and beneficiaries (Baker, 2007).

Setting a goal is the most important factor that must be taken into account when determining the location of the warehouse.T he goal may be either concerned with customer service and beneficiaries (distribution outlets), market service or production management service. If the goal were to serve customers and beneficiaries, then the location of the store should be close to the markets, customers and beneficiaries. This helps to give consumers better services and provides them with psychological reassurance. It also saves customers and beneficiaries effort, time and money (Obaidat, 199).

3- Supply:

Supply is known as the process through which services are obtained. It is also defined as the activity which is responsible for providing materials that conform to specifications at the right place, at the right time, in the right quantity and at the right price (Sulaiman& Isles, 2001).The main objective of supply is to satisfy customer requirements through optimum use of resources, including capacity, inventory and labour. Theoretically, supply seeks to link supply and demandwith minimum stock (Lowe, 2002).

The supply chain represents a series of activities carried out by the organization. It includes industrial facilities (warehouses, factories, operation and distribution centers and those in charge of them, merchants and agencies), in addition to the activities and tasks of purchasing, stock management, information, quality, production and distribution, delivery, and customer service, thus paving the way for the customer to accept the product and achieve his satisfaction with the service or the product.

Quality of Services:

The quality of services has become an important concern for various service, development and production institutions. It is no longer sufficient just to believe in the importance of providing a service of outstanding quality without working to crystallize this belief through efforts to raise the level of services to reach the degree of excellence that service providers aspire to achieve and that the beneficiaries also wish to get (Idris, 2006).

Despite the fact that the services sector has different nature and characteristics which make it characterized by complexity and great importance in the global and local economies, and with the intensification of competition in this sector, the design of successful services includes engineering a set of processes and resources for outputs that lead to responding to the expectations of customers. This is considered a real challenge and an important entrance to achieving quality that meets consumer satisfaction, with its equivalent in improving profitability, enhancing competitive position and achieving quality relationship with beneficiaries (Zeithaml, Parasuraman& Berry, 1999).

The service quality has many and distinct definitions in contrast to the needs and expectations of the beneficiaries. It is defined as the quality that is based on both the procedural dimension and the personal dimension as important dimensions in its introduction. The procedural dimension consists of specific systems and procedures to be provided, while the personal dimension refers to the way that the employees interact and deal with the beneficiaries (Dradakah and Shalaby, 2002). It is also defined as an equal level of qualities that characterize the service which is based on the ability of the service institution and the needs of customers, in addition to qualities that determine the ability of service quality to satisfy their needs and desires.It is the responsibility of every laborer within the company (Abdul Mohsen, 2006).

The Importance of Quality:

Quality is one of the factors that determine the volume of customers and beneficiaries' demand for the company's products and services. Its importance is explained as follows (Bakri, 2002):

1- The Importance of Quality for the Company:

The company gains its reputation through the quality of its products and services, especially through the relationships it has with suppliers and its working to provide products or services that meet the needs and desires of customers. If the products or services were of low quality, they must be improved in order to achieve the desired fame and reputation that will enable it to increase the market share and the ability to compete with similar organizations in the work environment.

2- The Importance of Quality for the Customer (Beneficiary):

When we apply quality in the organization and setting high and accurate standards of the product or service and its contribution to protecting the consumer (costumer or beneficiary) from fraud, the trust between the two parties is enhanced. Yet when the quality level is low, this will lead to the customer or the beneficiary retracting from purchasing the product or service from the company. This is associated with dissatisfaction and destabilization of trust between the customer and the company. Consequently, the failure of the product, which leads to the decline and extinction of the company, occurs.

Elements of Service Quality Management:

Alwan (2005) mentioned some important elements of service quality management. They are as follows:

1- Quality process: This process includes the quality development system for all activities in the companies.

2- Technology: Technology is a sub-system for managing the quality of services. It is no less important than the rest of the elements if it were to keep pace with the rapid development in the surrounding environment and perform tasks in a complete and advanced manner.

3- Organizational Structure: This includes the responsibilities and duties of laborers and working conditions in the internal environment of companies along with formal and informal methods of communication within companies.

4- Personnel system: It is a sub-system that includes education and training of employees in companies, developing their culture to keep pace with the cultures of the inmates in order to gain the trust and satisfaction of customers and beneficiaries.

5- Missions: These include quality tasks, in addition to business functions, and other tasks required by companies to increase their ability to compete and attract customers.

Previous Studies:

A study was conducted by Al-Hajj in 2016, and it aimed to identify the impact of the commitment to implement the logistical activities represented by (transportation, warehousing and supply) on the quality

of work service for banking institutions represented by (time cost, speed of service delivery, and speed of response).For achieving the objective of the study, the descriptive analytical method was used. Besides, a questionnaire was designed and distributed to the study sample members, which consisted of (140) workers and costumers in the Blue Nile Mashreq Bank. The study found a positive relationship between the dimensions of logistics management and service quality. It recommended the necessity to pay attention to logistics management and its activities because of their significant impact on achieving customer satisfaction and supporting the competitive feature of the institution. It also recommended increasing attention to the quality of the service provided and the factors affecting it and making continuous improvements to its services.

Another study was conducted by Hamed in 2015.It aimed to identify the impact of logistic management on the competitive feature of container transport in Port Sudan Port (1995-2014).The study sample consisted of (300) male and female employees. Besides, the descriptive, analytical, deductive and inductive methods were used. The researcher designed a questionnaire as a tool for collecting data from the study sample members. After conducting the appropriate statistical methods, the study showed that there is an impact of logistic management on the competitive feature of container transportation in Port Sudan port.

Another study was conducted by Manso et al. in 2013. The study aimed to evaluate logistics management practices in the health sector in Ghana and to find out the points of strength and weakness of the health services' logistics system. The study relied on a questionnaire to collect its information. Moreover, the study sample included workers in the health sector in Ghana. study concluded that there are points of strengths, represented by financing the purchase of therapeutic materials, equal distribution of purchases, effective supervision, continuous follow-up, and a firm assessment of the effectiveness and efficiency of logistic management. The study also showed points of weakness, represented by poor procurement planning, budgeting, lack of sufficient financial resources, miscalculation and forecasting, delays in the procurement process, and delays in receiving insurance claims. The study considered such weaknesses as some of the reasons for the inadequacy of logistics services of the health systems.

Diez-Garcia et al also conducted a study in 2013. The study aimed to provide evaluating indicators for the quality of food and nutritional care services. It relied on the data of (37) hospitals in Brazil. This was done by distributing a questionnaire to those in charge of the nutrition departments in the surveyed hospitals. The study highlighted the importance of food service quality indicators in assessing food service. It also identified the points and areas that would lead to more investment and restructuring. Furthermore, the proposed indicators include many procedures that permit a comparison between the services provided. Therefore, such indicators can be considered as a tool for assessing and monitoring nutrition services in hospitals.

Methodology and Procedures

The study aimed to manifest the impact of logistics management on the quality of services in private development companies. To achieve this objective, the researcher adopted the descriptive analytical approach in order to get the necessary data for the purpose of data analysis and classification to describe the study sample. Besides, the study tool; a questionnaire, was designed to collect data.

Study Population:

The study population consists of all employees of private development companies in southern Jordan.

The study sample:

The study sample included a number of 200 laborers who work in private development companies.

Tools of the Study:

There are many scientific research tools which are used to collect information and data. Based on the nature of the data to be collected, and on the method used in the study, it has become clear that the most appropriate tool to achieve the present study's objectives is the questionnaire which has been designed after reviewing the related literature, the research methods and the previous studies. The results of the descriptive statistical analysis of the data, which include the arithmetic means and standard deviations for all the axes of the independent study, and the parts constituting each axis, were relied on. It has been taken into account that the Likert scale used in the study is graded as follows: (1) Strongly Disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree.

Based on this, the values of the arithmetic means will be dealt with as follows: (3.67 - and above: high), (2.34 - 3.66: medium), (2.33 - and below: low).

Validity of the Study Tool:

The tool was presented to (10) arbitrators who has good experience and related specialization, to know their opinions about the consistency, clarity, and comprehensiveness of the questionnaire. The questions have been modified and re-worded based on the arbitrators' recommendation. Consequently, a number of questions were modified and deleted, in addition to reformulating some paragraphs to indicate directly and briefly what the paragraph aims for, hence achieving its apparent validity.

Stability of the Study Tool:

To verify the stability of the internal consistency of the tool, the Cronbach's Alpha coefficient was calculated on (22) laborers; an exploratory sample of the study population and outside its sample. The value of the reliability coefficient of the questionnaire was (0.87), which is a suitable value for conducting the study.

Study Results Analysis

Depending on the Statistical Package for Social Sciences (SPSS), the researcher used frequencies, percentages, and arithmetic mean to determine the extent to which the sample members agreed on the parts of the questionnaire.

First: The Independent Variable: Logistics Management

Logistics management in private development companies was measured through three dimensions (supply, warehousing, and transportation).Table (1) shows the arithmetic means and standard deviations of

the answers of the sample members to the questions related to these variables. The results of the descriptive statistics were as follows:

Table (1): Arithmetic means and deviations for the dimensions of logistic management

#	Part	Arithmetic Mean	Standard Deviation
1	Transportation	4.20	0.72
2	Warehousing	4.16	0.67
3	Supply	4.18	0.73
	General Average of Logistics Management Dimensions	4.18	

1- Transportation:

Table (2) Arithmetic means and standard deviations of the responses of the study sample members on the paragraphs related to the (transportation) axis

#	Article	Arithmetic Mean	Standard Deviation	Level by Average
1	Private development companies receive distribution vehicles at specific times	4.16	0.77	High
2	The company has the ability to compete in the field of transportation based on quality	4.26	0.98	High
3	Transport vehicles are regularly maintained to maintain their quality	4.28	1.01	High
4	The company manages the means of transportation to provide transportation service in a timely manner	4.16	0.91	High
5	The company relies on an integrated transport fleet that meets the needs of customers with high quality	4.12	0.86	High
6	Effective emergency measures are taken in a timely manner when all hazardous materials are transported	4.22	0.93	High
7	The company uses the latest technological means in order to reduce the time required to complete the transportation process	4.20	0.87	High
8	The company uses a team of consultants to follow up the transport of goods and their path	4.18	0.74	High

	to reach the customer in the least time			
	Arithmetic general average	4.20	0.72	High

Table (2) clearly shows that the arithmetic means for the answers ranged between (4.16 - 4.28), and it indicates that the highest value of the arithmetic means was for the paragraph that states that transport vehicles are maintained on a regular basis to maintain their quality, with a mean of (4.28) and standard deviation of (1.01). It is followed by "The company has the ability to compete in the field of transportation based on quality" with an arithmetic mean of (4.26) and a standard deviation of (0.98). Therefore, the lowest value of the arithmetic means reached (4.12) with a standard deviation of (0.86) concerning the part that states "The company relies on an integrated transport fleet that meets the needs of customers with high quality". The results shown in Table (2) indicate that private development companies in southern Jordan are keen to monitor transportation operations in order to maintain the quality of their services and to reduce the time required to complete tasks in a proper manner.

2- Warehousing:

Table (3) Arithmetic means and standard deviations of the responses of the study sample members to the items related to (warehousing) axis

#	Article	Arithmetic Mean	Standard Deviation	Level by Average
1	The company uses available opportunities to improve the quality of its warehousing and business management activities	4.22	0.81	High
2	Storage space in private development companies is appropriate	4.19	1.02	High
3	The company determines areas in storage systems based on productivity standards that reduce the burden and reduce the cost of service	4.13	0.86	High
4	The storage method is appropriate and ventilation is sufficient in the storage room	4.15	0.92	High
5	A record of the quantities generated for each section in the storage room is available	4.18	0.96	High
6	The company relies on an integrated system that integrates modern technology systems with storage activities to reduce errors	4.14	0.88	High
7	The company takes advantage of available opportunities to improve the quality of its warehousing and business management activities	4.22	0.87	High
8	The storage process is carried out in places close to the user to avoid the risk of waiting	4.12	0.76	High
9	The company periodically reconsiders the resources and equipment to achieve speed in the implementation of the storage process	4.10	0.87	High

10	The company uses the information for the purpose of planning warehousing operations in a fast and accurate manner in order to provide quality.	4.18	0.96	High
	Arithmetic general average	4.16	0.67	High

Table (3) clearly shows that the arithmetic mean of the answers ranged between (4.10 - 4.22). It indicates that the highest value of the arithmetic means was for the article that states: "The company uses available opportunities to improve the quality of its warehousing and business management activities", with an arithmetic mean (4.22) and a standard deviation (0.96). Moreover, the article that states: "The company takes advantage of available opportunities to improve the quality of its warehousing and business management activities" got the same arithmetic mean (4.22) and a standard deviation of (0.87). The article that states: "Storage space in private development companies is appropriate" ranked second, with an arithmetic mean (4.19) and a standard deviation (1.02). Therefore, the lowest arithmetic means value was (4.10), with a standard deviation (0.87) and it is related to the article that states: "The company periodically reconsiders the resources and equipment to achieve speed in the implementation of the storage process". The results shown in Table (3) indicate that private development companies in southern Jordan are keen to store the necessary materials and equipment in large areas in order to maintain their quality and to reduce losses and damage of such materials.

3. Supply:

Table (4) Arithmetic means and standard deviations of the responses of the study sample members to the items related to (supply) axis

#	Article	Arithmetic Mean	Standard Deviation	Level by Average
1	The time taken to complete the supply service transactions is sufficient	4.11	0.99	High
2	The company uses electronic communication methodology in its supply systems to reduce cycle time	4.22	1.03	High
3	Development service companies notify suppliers of changes in needs early	4.16	0.89	High
4	The company responds to the expected changes in customers and makes appropriate improvements to the supply service	4.12	0.86	High
5	The process of information flow between customers and the company is carried out on the basis of electronic supply systems to facilitate weekly and monthly supply orders	4.24	0.97	High
6	The supply companies are dealt with transparently	4.18	0.92	High
7	The company uses electronic supply systems in order to provide high quality services	4.26	0.85	High
8	The company has an alternative strategy in case of disruption or delay by the supplier	4.13	0.77	High
	Arithmetic general average	4.18	0.73	High

Table (4) clearly shows that the arithmetic means ranged between (4.11 – 4.26). It indicates that the highest value of the arithmetic mean was for the article that states: "The company uses electronic supply

systems in order to provide high quality services" with an arithmetic mean (4.26) and a standard deviation (0.85), followed by the article that states: "The process of information flow between customers and the company is carried out on the basis of electronic supply systems to facilitate weekly and monthly supply orders" with an arithmetic mean (4.24) and a standard deviation (0.97). Therefore, the lowest arithmetic means value was (4.11), with a standard deviation (0.99) and it is related to the article that states: "The time taken to complete the supply service transactions is sufficient". The results shown in Table (4) indicate that private development companies in southern Jordan are keen to adopt advanced systems in order to provide high quality service and are also concerned with transparency of transactions and services related to the supply process.

The Dependent Variable: Quality of Services

Table (5) Arithmetic means and standard deviations of the responses of the study sample members to the articles related to the axis (quality of services)

#	Article	Arithmetic Mean	Standard Deviation	Level by Average
1	There is an obvious change in the level of quality of services provided by private development companies	4.25	0.87	High
2	There are internal committees concerned with specifications and control over the safety of workers, materials and products in private development companies	4.21	0.99	High
3	Customer suggestions and complaints are handled transparently and effectively	4.23	1.02	High
4	The company provides its services properly and from the first time	4.16	0.87	High
5	The company's employees interact with customers' needs and develop the services provided to them	4.13	0.74	High
6	The company provides its services properly and from the first time	4.12	0.98	High
7	The company follows procedures by which the quality of services provided to customers is measured	4.26	0.86	High
8	The company is concerned with creativity and innovation in creating, providing and improving services	4.25	0.84	High
	Arithmetic general average	4.20	0.69	High

Table (5) clearly shows that the arithmetic means ranged between (4.26 – 4.12). It indicates that the highest value of arithmetic means was for the article that states: "The company follows procedures by which the quality of services provided to customers is measured" with an arithmetic mean (4.26) and a standard deviation (0.86), followed by the article that states: "There is an obvious change in the level of quality of services provided by private development companies" with an arithmetic mean (4.25) and standard deviation (0.87). The same value of arithmetic mean was for the article that states: "The company is concerned with creativity and innovation in creating, providing and improving services" with an arithmetic mean (4.25) and a standard deviation (0.84). Therefore, the lowest arithmetic means value was (4.12), with

a standard deviation (0.98) and it is related to the article that states: "The company provides its services properly and from the first time". The results shown in Table (5) indicate that private development companies in southern Jordan are concerned with advanced oversight, systems, materials and competent human resources in order to provide high quality services based on creativity, innovation and everything that is advanced and modern.

Testing the Study Hypotheses

The main and sub-hypotheses of the study were tested by using multiple and simple regression analysis as follows:

There is no statistically significant effect of logistic management (transportation, warehousing, supply) on the quality of services at the level of significance (0.05).To test the main hypothesis, a multiple regression test was used for identifying the effect of each independent variable (transportation, warehousing, supply) on the dependent variable (quality of services). Table (6) shows the results:

Table (6): The results of the multiple regression analysis of the impact of the dimensions of logistics management on the quality of services

Logistics Management	B	Standard Error	Beta	Calculated T Value	T Significance Level
Transportation	-0.306	0.133	-0.204	-2.296	0.022
Warehousing	0.564	0.147	0.439	3.811	0.00
Supply	-0.817	0.132	-0.630	-6.140	0.00

*Statistically significant at (α>0.05) level.

It is obviously noticed in Table (6), and by following up on the values of the (t) test, that the following sub-variables related to (transportation, warehousing, supply) have an impact on the quality of service, since the calculated (t) values were (-2.296, 3.811, -6.140), respectively. They are significant values at the level of significance (α>0.05).This indicates the rejection of the null hypothesis, the acceptance of the alternative hypothesis and the existence of a statistically significant effect of logistics management with its dimensions (transportation, warehousing, supply) on the quality of services in private development companies.

Table (7): The results of a stepwise multiple regression analysis to predict the quality of services through the dimensions of logistics management

The order of entry of the independent elements in the prediction equation	R^2 value coefficient of determination	(F) Value	Calculated T Value	Level of Significance
Transportation	0.167	39.878	-2.296	0.00
Warehousing	0.205	25.484	3.811	0.00
Supply	0.225	19.117	-6.140	0.00

*Statistically significant at (α>0.05) level.

When conducting the progressive multiple regression analysis to determine the importance of each independent variable in contributing to the mathematical model that represents the impact of logistics management with its dimensions (transportation, warehousing, supply) on the quality of services, as it is

shown in Table (7) which shows the order of entry of the independent variables into the equation regression, the supply variable ranked first and explained 16.7% of the variance in the dependent variable. The warehousing variable then explained (20.5%) of the variance in the dependent variable, while the transportation variable explained, with the previous variables, (22.5%) of the variance in the dependent variable. The main hypothesis was divided into three sub-hypotheses as follows:

The first sub-hypothesis: There is no statistically significant effect of logistics management (transportation) on the quality of services at the level of significance (0.05).

To test the first sub-hypothesis, a simple regression test was used to identify the effect of transportation management on the quality of services. Table (8) shows these results:

Table (8): The results of a simple regression analysis of the impact of transportation management on the quality of services

Correlation R	Correlation Direction Beta	R^2 The coefficient of determination (the effect)	F Value	Statistical Significance
0.277	0.277	0.076	16.625	0.00

*Statistically significant at (α>0.05) level.

Table (8) clearly shows that the statistical value (F) reached (16.625) with a statistical significance level less than (0.05), which indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis. It also shows that there is an effect of the management of transportation on the quality of services in private development companies, where the value of the correlation (R) was (0.277) with the coefficient of determination (2^R) (0.076), meaning that the effect of transportation management on the quality of service is (7.6) percent.

The second sub-hypothesis: There is no statistically significant effect of logistics management (warehousing) on the quality of services at the level of significance (0.05).

To test the second sub-hypothesis, a simple regression test was used to identify warehousing management on the quality of services. Table (9) shows these results:

Table (9): The results of simple regression analysis of the effect of warehousing management on the quality of services

Correlation R	Correlation Direction Beta	R^2 The coefficient of determination (the effect)	F Value	Statistical Significance
0.201	0.201	0.040	8.462	0.003

*Statistically significant at (α>0.05) level.

Table (9) shows that the statistical value (F) reached (8.462) with a statistical significance level less than (0.05), which indicates the rejection of the null hypothesis and acceptance of the alternative hypothesis. It also shows that there is warehousing management has an effect on the quality of services in private development companies, where the correlation value (R) was (0.201) with a coefficient of determination (2R) (0.040), meaning that the effect of warehousing management on service quality is (4%).

The third sub-hypothesis: There is no statistically significant effect of logistics management (supply) on the quality of services at the level of significance (0.05).

To test the third sub-hypothesis, a simple regression test was used to identify the effect of the supply management on the quality of services. Table (10) shows these results:

Table (10): The results of a simple regression analysis of the effect of supply management on the quality of services

Correlation R	Correlation Direction Beta	R^2 The coefficient of determination (the effect)	F Value	Statistical Significance
0.408	0.408	0.040	39.878	0.00

*Statistically significant at (α>0.05) level.

Table (10) shows that the statistical value (F) reached (39.878) with a statistical significance level less than (0.05), which indicates the rejection of the null hypothesis and the acceptance of the alternative hypothesis. It also shows that the supply management has an effect on the quality of services in private development companies, where the correlation value (R) (0.4.8) with the coefficient of determination (2R) (0.167), meaning that the effect of supply management on service quality is 16.8%.

Discussion of the Results

It was found that the levels of transportation management, warehousing management and supply management in private development companies were high. It was also found that the level of quality of services provided in private development companies was high, and the results showed a statistically significant effect of the dimensions of logistic management (transportation, warehousing, supply) on the quality of services provided in private development companies at the level of significance (0.05). The present study agrees with Al-Hajj (2016) concerning the fact that there is a positive relationship between the dimensions of logistics management and service quality. It also agrees with Hamed (2015) concerning the effect of the logistics management on the competitive feature of transportation, Manso, et al (2013) regarding the existence of points of strengths represented by financing, purchasing and distributing materials, the existence of strict assessment of the effectiveness and efficiency of logistics management. It also supports Diez-Garcia et al (2013) concerning the importance of service quality indicators in service evaluation. It also identifies the points and areas that lead to more investment and restructuring. The proposed indicators include many procedures that permit a comparison between the services provided. The present study, moreover, agrees with Rajath & Baptise (2012) concerning the fact that it is important to take help of external sources to conduct logistics tasks, to develop services and maintain their quality, and to be creative and innovative in providing services to increase their quality and increase opportunities in investment and competitiveness.

Recommendations

The present study recommends that:

1- The quality of services provided in private development companies positively affects their growth. Therefore, it is necessary to study and understand the stages and levels of providing services with high quality, and to know how to properly manage those stages.

2- There should be an increase of the interest in the quality of services provided and the elements that affect them. Furthermore, the services provided should be continuously improved.
3- Alternative strategies should be adopted when there is any change in the internal or external environment of private development companies, and part of their budget should be devoted for this purpose.
4- Attention should be paid to the study of logistics management and its activities because of their great importance in supporting competitive feature and achieving customer satisfaction.
5- There should be a focus on supporting research and development to enhance the field of logistics management, due to its importance in improving the quality and efficiency of service delivery.
6- Special curricula and university majors in the field of logistics management should be introduced at the local level.

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