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The Impact of Supply Chain Activation on Service Quality in Jordanian Telecommunication Companies

أثر تفعيل سلسلة التوريد على جودة الخدمة في شركات الاتصال الأردنية

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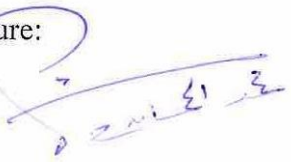

Examination Committee's

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Dedication

I dedicate this thesis to:

My beloved family who raised me to be a better person, and always will be there for me.

My parents, Dr. Ahmed Hamaida my father, Zaher Hamaida my mother.

My brothers and sisters Ehab, Islam, Abdulrahman and Mays Al Hamaydeh.

My friends and relatives.

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The Impact of Supply Chain Activation on Service Quality in Jordanian Telecommunication Companies

Prepared by: Mohammad Hamaideh

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Abstract

This study aimed to investigate the impact of the Supply Chain Activation on Service Quality. The study domain consisted of the three existing Jordanian telecommunications companies (Orange, Umniah and Zain).

This study used descriptive as well as cause/effect. Data collected from Jordanian telecommunications companies (Orange, Umniah and Zain) by means of questionnaire. The questionnaire was distributed to 187, and just 175 were suitable for further analysis. After confirming normality, validity, and reliability of the tool, correlation between variables was conducted, and then hypothesis was tested by using multiple regressions.

The results show that Supply Chain Activation is implementing moderate, while the Service Quality is implementing highly in companies. And there are strong relationships between Supply Chain and Service Quality variables. The results also show that of multiple regressions show that there is a significant effect of Supply Chain on Service Quality of telecommunication companies in Jordan. Finally, the study recommends making other studies of the same variables in industrial companies in Jordan.

Key Words: Supply Chain, Service Quality, Telecommunication Companies.

أثر تفعيل سلسلة التوريد على جودة الخدمة في شركات الاتصال الأردنية

اعداد الطالب: محمد حمايدة

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الملخص

هدفت هذه الدراسة إلى قياسأثر تفعيل سلسلة التوريد على جودة الخدمة في شركات الاتصال الأردنية.

منهج هذه الدراسة وصفية سببية. فقد تم جمع البينات من شركات الاتصال الأردنية (زين، وأرونج، وأمنية) من خلال الاستبيان ووزعت هذه الاستبيانات على (187) فرداً، وكان (175) صالحة للتحليل. وبعد التأكد من طبيعة، وصحة، وموثوقية الأداة، تم الربط بين المتغيرات، ثم اختبرت الفرضية باستخدام الانحدارات المتعددة.

وأظهرت النتائج أن مستوى تفعيل سلسلة التوريد في شركات الاتصال الأردنية متوسطة، بينما تنفذ جودة الخدمة بمستوى عالي. وأن هناك علاقة قوية بين متغيرات كلا من تفعيل سلسة التوريد وجودة الخدمة. وأظهرت نتائج الانحدارات المتعددة أن هناك أثر لتفعيل سلسلة التوريد على جودة الخدمة ومتغيراتها في شركات الاتصال الأردنية، وأخيراً أوصت الدراسة على إجراء دراسات أخرى عن نفس المتغيرات في الشركات الصناعية في الأردن.

الكلمات المفتاحية: تفعيل سلسة التوريد، وجودة الخدمة، وشركات الاتصال.

Chapter One: Study Framework

1.1 Introduction

The global market has become less stable and more complex by the time; however, the ever-growing trend of globalisation still provides opportunities for managers and administrators to conduct trades operations widely beyond the Rankings of their organisations. Considering that high-demanding customers, customised products, it became necessary for organisations to focus on service quality, therefore, it became necessary for supply Chains to be more flexible and adaptive to numerous uncertainties in the unstable market.

Due to these changes, most supply Chainconcepts openly recognise the products and services flow throughout the Supply Chain; and the thatare characterised by more logistics-related communications, greater adjustment among the organisation and its supplier's activities, as well as the differences between the logistics of the organisation's activities itself and the activities of its suppliers (Guo et al., 2013).In the past decades, the Supply Chaindeveloped more and more. This growth has been spotted in terms of modelling and analysing numerous emerging issues given the development of complex networks among different organisations throughout the world. These issues relate primarily to the design, planning, and coordination of materials, information, and flows of funds throughout the Supply Chain, that issues have become the main concerns of organisations (Singhal et al., 2011).

The importance of the Supply Chainhas raised in reaction to several critical business requirements. As organisations began to expand modern management tools to their suppliers and customers in search of additional

methods to reduce costs and improve their processes, they became stricter when applying and adopting internal computerised techniques and management methods in the past, one of these methodsare provide service quality (Ross, 2016).

Service quality is considered an important tool to distinguish the organization over its competitors in the market. Because, Service quality is an evaluation of the centre reflects the awareness of reliability, responsiveness, empathy, and tangible customer elements while the satisfaction of a more comprehensive, and is influenced by perceptions of the Service quality, product price, quality, situational and personal factors. (Islam, 2014).

The importance of the SC can also be witnessed through its relationship with the e-business environment and its continuous development. E-business can increase the engagement of Supply Chainin business activities.It also provides the Supply Chainmanagement with information flows that will ensure effective integration and control and delivers the right products to the right customers at the lowest cost possible, to achieve maximumeconomic benefits (Yang, 2012).

It seems that the supply Chain activation is crucial for the organization’s success. Implementing all supply Chain elements (Customer relationship, Technology and Tools, Performance Measurement, Supplier Intimacy, Resources) that can create service quality (Reliability, Responsiveness, Empathy, and Tangibles). Therefore, this study is devoted to investigating the effect of supply Chain activation on service quality.

1.2 Problem Statement

Most organisations have become increasingly competitive and constantly changing about customer needs, desires, and the changing

market conditions. Therefore, organisations found it necessary to distinguish themselves from other organisations working in the same field to adapt and survive within the changing environmental conditions and to distinguish themselves from others in their capability to build advanced supply Chain strategies for suppliers and other stakeholders.

Some thesis isrecommended the importance of developing plans to develop the activation of supply Chain in terms of relations with its elements, integration and interdependence of its operations. Because the Supply Chain management relationships with the company have a deep impact on customer service in all aspects, and the quality of this service can only be achieved through the successful effective management of Chain elements in the way that achieves the customer's satisfaction (El-Saghierand Nathan 2013).

The current study will deal with the three major telecommunication companies, which are **Zain**, **Umniah**, and **Orange**; these companies provide both mobile network and broadband services across Jordan, and each has over 30% market share in terms of mobile subscribers. These three companies employ supply Chain to ensure that they are aligned to industry standards, and carry out long-range demand forecast

As supply Chains operate as a network or a system, any problems they encounter in one part will affect the entire supply Chainand can lead to increased supply Chain deficiencies, which, in turn, will affect service quality as a result. Therefore, this study came to determine The Impact of Supply Chain Activation on Service Quality in Jordanian Telecommunication Companies (Zain, Umniah, and Orange).

Based on the above recommendations the current study is dedicated to answer the following main question: Do Supply Chain Activation components influence Service Quality of Telecommunication companies?

1.3 Study Purpose and Objectives:

The supply chain is of great importance in giving value for the organization, attracting its customers, the several studies have shown that raising productivity comes from activating the supply chain, which is the main engine for achieving service quality. The study derives its importance from:

The theoretical importance: The study investigates the effect of supply Chain activation on service quality of Telecommunication companies. Therefore, the current study aimed to find the effect of the effect of supply Chain activation on service quality of Jordanian Telecommunication companies.In addition, that such a study will add a new to the world of knowledge, contribute to the enrichment of information, the development of scientific research,moreover the current study will shed new light on previous literature, where academicians may use it as reference.

The practical importance: Concentrate on the importance of the results of the correlation between the variables of the study, which identify the most influential and stronger or even the most vulnerable aspects to identify the aspects to be increased attention.In addition, the main objectives of this study are to provide recommendations to Telecommunication organizations regarding supply Chainand service quality. Furthermore, recommendations can be used by other industries, and decision makers concerned with supply Chainand service quality.

1.4 Importance of the Study

This study might be considered as the first study, which investigates the effect of supply Chain activation on service quality in Jordanian.

This study is important for Telecommunication industry; it is not only usefulfor those who work in Telecommunication company’s industry,

but also toother practitioners who work in other industries as well as for scholars and researchers.

Therefore, the importance of this study comes from the following scientificand practical considerations:

1. Highlight on the importance of supply Chain activation and its implementation on the Jordanian Telecommunication companies and its effect on achieving service quality.
2. Contribute to the development of the Telecommunication companies in Jordanian, which may lead to maintain these companies work effectively.
3. Help other researches to talk about supply Chain activation, and its importance either on the same industry or for other industries.
4. Help the decision makers to gain the benefits of applying supply Chainand give recommendations of using supply Chain.

1.5 Questions and Hypotheses of the Study

The study aims to answer the following research main questions:

1. What is the extent of activation of the supply Chain in Jordanian telecommunication companies?
2. What is the extent of Service Quality in Jordanian telecommunication companies?

   The previsequestions will be answered by the descriptive method.

3. Do the supply Chainactivation effects on theService Quality of Telecommunication Companies?

Based on supply Chain elements the following five sub-questions are derived:

3.1. Do the Customer Relationshipeffectson Service Quality of Telecommunication Companies?

3.2. Do the Technology and Tools effects onthe Service Quality of Telecommunication Companies?

3.3. Do the Performance Measurement effects onService Quality of Telecommunication companies?

3.4. Do the Supplier Intimacyeffects onService Quality of Telecommunication companies?

3.5. Do the Resources effects on quality service of Telecommunication companies?

The previse questions will be answered by the cause/effect method, by testing the following hypotheses:

Study Hypotheses:

H_{01}: The Supply Chain Activation do noteffecton Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Based on the components of Supply Chain activation the following sub-hypotheses:

$H_{01\text{-}1}$: The Customer Relationshipdo not affect Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01\text{-}2}$: The Technology and Toolsdonoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

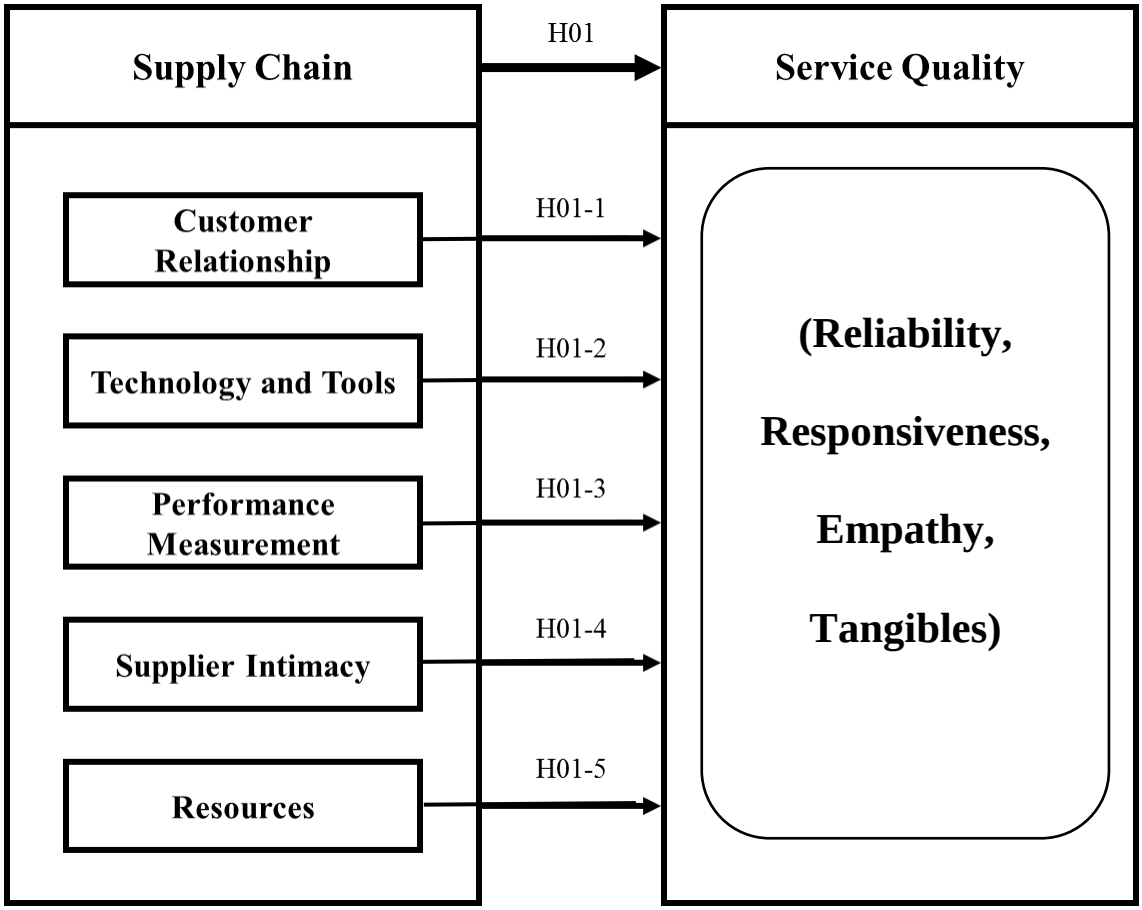
$H_{01\text{-}3}$: The Performance Measurement donoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01\text{-}4}$: The Supplier Intimacy donoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

$H_{01\text{-}5}$: The Resources donoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

1.6 Model of the Study

Figure 2-1: Model of the Study



Sources: The model is developed based on the following previous studies:(Sartori and Frederico,2012; Fredericoand de Souza,2017; Ombwayo et al, 2012; El-Saghier, 2015; Al-Azzam 2015; El-Saghierand Nathan 2013; MAMO, 2015).

1.7 Operational and ProceduralDefinitions

Supply Chain

Supply Chain is a group of actions that are created by an organisation to manage its functions effectively and efficiently, in lower costs and a faster production cycle, in line with customer demand, that can respond to changing levels of customer demand with minimal delay.

Customer relationship: The practise of an organization to develop of connection with its customerscontinuously. The relationship includes marketing links, sales support, technical assistance and customer service, and is measured by the degree of customer satisfaction through the buying cycle and receipt of goods or services.

Technology and Tools:An item or implement used for a specific purpose. that can be a physical object such as facilities, buildings or equipment, and a technical object such as a web authoring tool, hardware or software program.

Performance Measurement: The indicators that are used to evaluate things such as results, production, demand andoperational efficiency to gain a more objective to understand by how their business operationsimprovement is required.

Supplier Intimacy: The actions that enable organization to build the benefits greater with supplier's intimacy for a business might include improved highly tailored problem-solving capabilities and greater adaptation of products to customer needs, as well as higher customer loyalty levels.

Resources: An economic element is used to accomplish an activity or procedures to carry out a project and achieve the desired results, such as facilities, equipment, machinery, people, systems and others.

Service Quality

Service quality is the organization's ability to assess the extent of the service provided compatibility with the customer's expectations, often assess the Service quality provided for its customers to improve their services, identify problems quickly, assess customer satisfaction appropriately place and time or provide appropriate services on the first request.

Reliability: The ability of an organization to consistently perform its intended orrequired function or mission, within failure-free performance on demand or a specified timeframe, under specified environmental and duty-cycle conditions of serves.

Responsiveness: The organization's ability to recognize, interact with, and interact with changing customer needs, using technology to learn more about customer needs and train their employees to deliver the highest standards of customer service.

Empathy:The ability of an organization to share customers' attentions, needs, interest, and emotions as if they were their own.

Tangibles:The capable of organization to own material or substantial things, that are used to contribute to brand recognitionand customer loyalty as gifts or free service, to create a higher impact of Service quality.

1.8The StudyLimitations and Delimitations

Time Limits: The researcher prepared this study during the academic year 2017/2018.

Place Limits: The study was applied to Zain, Umniah, and Orange in Amman, Jordan.

Human Limits: The study community was limited to all managersin Telecommunication Companies and employee in supply Chain departments only.

Delimitations:

The study used one industry, which limits its generalizability to otherindustries. The study was conducted in Jordan and, therefore, thegeneralizability of this study to other countries of the same industry or otherindustries may be questioned. In addition, similar industry studies in Jordan areyet to be conducted.

The study investigated the impact of five supply Chain activation variables on four service quality variables where there are more supply Chain activation elements and service quality elements that not taken in this study.

Limitations to data access refer to the fact that data gathering throughthe questionnaires and annual reports is controlled to the period of thesequestionnaires, which may limit the quality and quantity of the data collected.And lack of similar studies in Jordan.

Chapter Two: Literature Review and Previous Studies

2.1 Literature Review

1.1.1 Supply Chain

Supply Chainis considered among the modern management methods, to meet the challenges in the technology and information era. This Chain includes a complete range of functional activities and is based on the development of accesses to achieve efficient integration of suppliers with customers, where products are produced and distributed in the appropriate quantities. The concept of supply Chain has several definitions:

Supply ChainDefinitionand Importance

The Supply Chainis a complex entity that consists of a group of practices that are created by an organisation to manage its functions effectively, which is affected by numerous factors, such as suppliers, wholesalers, distributors, manufacturers, and customers (Deshpande, 2012).

TheSupply Chaincan be defined as the systemic and strategic management of the traditional functions in a business and the strategies they use within a single organisation with the aim to improve the performance of an organisation and itsSupply Chainon the long run. (Lietkeand Boslau, 2007).

According to Quesada, et. al. (2012) the Supply Chaincan be also defined as the operational excellence that aims to deliver an extraordinary experience to the customers.

While in the service industry, the Supply Chaincan be defined as the process of purchasing and moving the service from one component to another component of the business Chain, so several direct and indirect service providers also known as service integration is responsible for the Supply Chainin the delivery of the service to the customer (Sakhujaand Jain,2012).

Through previous definitions the SC is the activations of the joint units between the organization and its agents, wholesalers and retailers through which a good or product or service is marketed by a link between the starting points and the end points.

The importance of the Supply Chainbeing the essence of adopting an integrated, coordinated, disciplined and structured approach to managing the organization's services or products,through the Supply Chain, effective communication between business stakeholders (Raghavendra and Nijaguna,2015).

On the other hand,the Supply Chainbegan to become more evident as global competition and the need for a broader inter-organizational cooperation began to surface in the past few decades, which forced – and still forces – organizations to take actions that would improve their supply Chains and make them more flexible and responsive to occurring changes (Surowiec, 2013).

Therefore, thatover the past two decades, the Supply Chainhas been regarded as one of the most important factors that play a crucial role in maintaining competitiveness and organizational effectiveness. This is because organizations are fully aware the importance of Supply Chainand its effect on their integrated relationships with both suppliers and customers alike.

Therefore, the purpose of the Supply Chainoperation in the organization is to improve communication with the customer, and to consolidate the effective interaction between the business elements Chain, in addition to identify, process and transfer the required inputs to the best(Taylor,2014).

In addition, Supply Chainserves the service provider and customer from the first time, and this is done through three forms at the global level: TheSupply Chainfor serial services, parallel services and mixedservice (Sakhujaand Jain,2012), Where the service flows from the initial service provider down into a straight flow across multiple elements of the Supply Chainbefore eventually reaching the customer. Figure 1 below, depicts the graphical representation of the traditional the Supply Chain. (Gold et al, 2013).

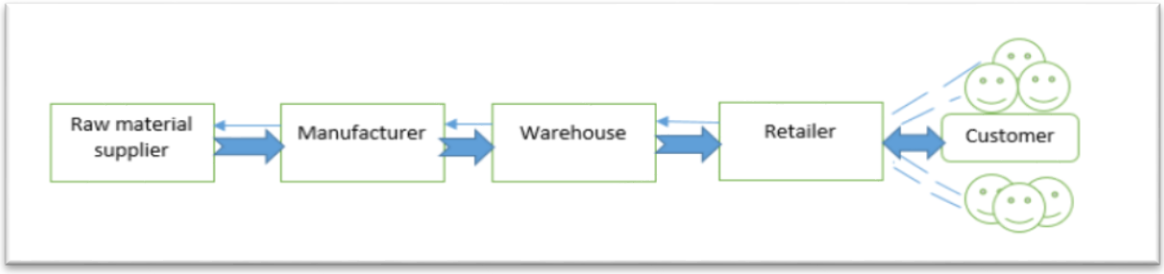


Figure 2.1: Schematic Diagram of Conventional Supply Chain(Mirazet al, 2012)

Supply ChainDimensions

Supply Chain has more actions that are measured its, **Miraz, et. al**.(2016) used supplier intimacy variable, while **Fredericoand Souza**(2017) used customer relationship, Technology andTools, Performance Measurement and Resources variables.

Customer Relationship: The modern organizations began to see the customers as a real partner and work to develop relationships with them long-term, which will help the organization achieve quality of service cannot be imitated by competitors, so Customer Relationship is ability to

save the customers, with focus on developing closeand long-term relationships with existing customers, and identify the customer's wishes, the time when the services are needed, and the speed to access these services(El-Shoghariand Abdallah, 2016).

The importance of Customer Relationship activating in the organization's Supply Chainis great benefits for the organization, the management of Supply Chainhelps the organization to achieve customer contact and deal with them, and the possibility of benefiting from external opportunities as a result of the relationship between the organization and its customers and suppliers, other helps to flow the information about customers, materials, services and money to the organization easily(Albarazi,2012).

Technology and Tools: Is Used information technologies, equipmentand toolsavailable to make easy the Supply Chainin the organization, that are includeInternet, software for electronic exchange of information, and modern technology (Frederico,2017).

The Technology and Tools role in Supply Chainis increased the performance, efficiency, responsiveness interacts of the Supply Chainunites with each other, there are many Technology and Tools that enhance Supply Chainperformance, such as: Networks, Facilities,Information, Inventory and Transportation were able to save money, help to achieve a minimum of cost and high demand, product or service distribution between the organization and the customer, or the relationship between the supplier and retailer(Assaf, 2015).

Performance Measurement: Is a system used to show indicators of Supply Chainoperations such as procurement, storage and marketing of the organization, and these indicators help the organization to obtain

information about overall performance in sales and customer service (El-Shoghariand Abdallah,2016).

The strategic purpose of Performance Measurement is to improve the ability of quickly responding to customer requirements within the advantages of response speed by reducing Service quality time, also, the Performance Measurement is designed to reduce costs, they achieve the objectives associated with cost reduction, thesis indicators describe the degree to which operations achieve the objectives of cost, quality, speed and flexibility and creativity in a specific period of time in Ranking to satisfy the needs and requirements of the customer in quality (Alrfie,2016).

Supplier Intimacyis the communication process between the organization and suppliers are based on mutual trust, benefit and partnershipand ensure the success and profitability, therefore, the organization work a long-term relationship with suppliers based on transparency and clarityand commitment(Ibrahem,2012).

Supplier Intimacyis important in the Supply Chainthrough adopting the organization's direction and objectives and participating in success and loyalty with the organization, negotiations practiced by the supplier with the organization in Ranking to maintain the cost of service or product of the same quality, cooperation between the oorganization and suppliers in ranking to improve quality, to support the technical and administrative, and to supply the product or service in the better(Athahabi,2017).

Resources:Frederico study (2017) defies the Resources are "*Refers to the common and competitive resources used to run the supply Chain processes such as facilities, equipment, machines, people, systems among others*".

Netland,et. al.(2007) classified resources are of50 best practices in the supply Chainthatmost researchers have agreed, because it gives a final performance on a global level for Supply Chainin terms to be a leader in implementing production technology, strongly focused on core competencies, use of high machinery and facilities, high utilization of transport vehicles, stocks and individuals, large unexpected increase in demand and delivered within agreed limits of short delivery terms.

Requirements for the Supply ChainSuccess

The success of Supply Chainrequirements is as defined by Assaf(2015) and Ross(2011) in the following factors:

- Building the trust with the customer to achieve the organization's goals, which leads to mutual benefits,
- Participate and cooperate with suppliers and customers,
- Harmonize between the organization’s processes and theService qualityand building integration among them,
- Activate communication and reduce the distance between all parties,
- Sharing information and knowledge with suppliers and customers,
- Sharing common goals that lead to reduced time and increased efficiency.

Based on the above, that the success of Supply Chainactivating requires the integration of the organization’s relationships with customers, tools and technology are used by the organization in the Supply Chain**,** indicators and performance measures that give the organization a clear picture of how the Supply Chainperforms, a good organization relationship with suppliers reflects the suppliers relationship with customers, and the organization has adopted the good sources, that manages the Supply Chainsuccessfully.

2-1-2 Service Quality

Service quality is the mission of competitive advantage, that indicates to organization's performance correctly, and provides the customer a service that meets the needs of, customers want quality services that meet the features required by them features they expect or see in the ad, therefore, the organization must provide quality services meets the needs and desires of customers and be their expectations, to survive and succeed in the competition market.

Service Quality Definition and Importance

Service qualityis clearly an important element of competition in a variety of markets, ranging from traditional service and retail industries to increase even the manufacturing sector (Buell, et al., 2016).

Service qualityhas widely been discussed since the 20th century and its idea is still relevant to help today organisations in creating differentiation and gaining competitive advantage in an era of Ranking less world and globalisation, which is often seen as a multi-dimensional construct (Ismail and Yunan, 2016).

Garg (2014) defined Service qualityas the overall evaluation of a specific organisation that results from comparing its performance with consumers' general expectations of how an organisation in its industry should perform.

According to Omar et al. (2016) service qualityis usually defined as the customer's judgement of the overall excellence or superiority of the service. And, Service qualityis referred to by Rostami et al. (2016) as appropriate services for achieving organizational objectives, offering appropriate services in the appropriate place and time, or offering appropriate services at the first request.

InMohammad et al, (2016) study defines Service qualityis as the general impression of the consumer about the services provided by the organization, and is defined as a measure of the extent to which the level of service meets the customer's expectations, in addition, It is the expression of consumer attitudes that reflect excellence and excellence in the service provider's process and consumer judgment over universal service.

Due to the increasing importance of service sector in the economy, the measurement of service quality began to be an interest factor for the individuals of this field (Aftab et al., 2016).

Today it is clear that to preserve customers and obtain competitive advantage, improving service quality plays a key and vital role inorganizational survivor. Comprehensive quality is, in fact, a cultural issue, which changes into a practical tool. It means at first the idea of comprehensive quality must reside in employees' minds and then such mental conception changes into operational activities as a tool for increasing organizational quality (Yahyazadehand Omrani, 2015).

In addition, Service Quality plays a role in obtaining competitive advantage among competitors, it is positively related with customer loyalty (sincere customer) and their attitudes towards the service provider, it effects customer satisfaction and loyalty, brand image and profit, so that the Service qualitycan be achieved in organizations only through dimensions that include: Reliability, Responsiveness, Empathy, Tangibles (El-Saghier, 2015) therefore this is confirmed by the current study.

Service QualityDimensions

The researcher confirmed previously that the Service qualitycan be measured through Reliability, Responsiveness, Empathy, Tangibles, in El-Saghier(2015) study also, in Mohammad et al. (2016) study used these

variables to measure the Service quality**,** therefore, the definitions will display these variables according to the studies mentioned:

El-Saghier(2015) definedtheService qualitydimensions:

- **Tangibles**,the degree of availability of physical facilities, equipment, and sufficient for staff.
- **Reliability**, the degree of service achievement the customer with confidence and accuracy.
- **Responsiveness**, the degree of readiness of service providers to help customers and the speed of service achievement.
- **Empathy**, the degree of care and personal attention to customers.

In Mohammad et al. (2016) study defined the Service quality dimensions:

- **Tangibles**, the ability to have owned a physical equipment and facilitiesand the staffappearance by the organization.
- **Reliability**, the ability to serve the customer accurately and reliably.
- **Responsiveness**, the ability to help customers and provide quick service.
- **Empathy**,the ability to take care individual and attention to customers.

In Urban. (2010) study defined the Service quality dimensions:

- **Tangibles**, which refers to physical facilities, equipment, and personnel.
- **Reliability**, which refers to the ability of the organization to perform the promised service accurately and without fail.
- **Responsiveness**, which refers to the willingness of the organization and its employees to help customers and provide them with prompt service.
- **Empathy**, which refers to how employees provide care and individualized attention for the customers of the organization.

That each of these variables are important in supporting the Service quality,

Tangibles: the shape and appearance of the material and physical facilities and equipment as well as the appearance of individuals in this

organization can be referred to as widely as the modern equipment, when they are visually attractive facilities and professional linked to the service, that gives a positive impact on the organization's performance, therefore the Service qualityand customersatisfaction, then the sustainability organization (Adeleke,2013).

Reliability: has demonstrated knowledge and skillsto deliver timely and accurate services in the organization, gives the elements of trust in the service in the organization, allows hand ling of customer problems, the performance of services the first time, in the organization, enables the organization to provide timely services and keep records error-free, thus the Service quality that establishes customer loyalty (Saghierand Nathan, 2013).

Responsiveness: was able to provide appropriate solutions in a timely manner and in a way that holds the customer value in the organization, in addition to providing fast service effectively in difficult situations, make the employees want to help customers and respond to their requests, therefore, the organization earns quality of service and thus customer satisfaction, which effects the financial sustainability (Kanyurhi,2013).

Empathy :Enables the organization to the attention and care to customers in addition to convenient working hours, it helps employees to deal with customers in a professional manner and supportsunderstanding of their needs, thus Service quality, thus establishing customer satisfaction (Santhiyavalli,2011).

As mentioned earlier, the researcher finds that the Service qualitythat gives value to the organization between the competitors, as well as customer loyalty to that service, thereby increasing profits and market share, that the Service qualityis measured by the following variables

(Reliability, Responsiveness, Empathy, Tangibles),Which in turn gives the value of that service and therefore customer loyalty services that organization, which earns the sustainability of business organizations.

2-1-3 Relationship Between Supply Chainand ServiceQuality

Omar et al (2010) show that the Supply Chain management enable the organizations to provide the right service at the right time and at reasonable cost through supply Chain management offers, to manage the flows of services, information and funds between suppliers and customers to meet the needs of the consumer in an effective manner.

The purpose of Nassiry et al. (2012) wasstatement of the impact of Supply Chainmanagement in Service quality, has shown that Supply Chainmanagement practices have a positive impact on Service quality**,** It supports the process of connecting suppliers with customers easily, and that effective of the Supply Chainmanagement practices can enhance the Service quality in the organization, The provision of high-quality services would increase financial and non-financial services, and that the organization's successful Supply Chainmanagement practice is one of the most important engines of Service quality.

Odhiambo, (2014) explained that the Supply Chainmanagement has an impact on the Service qualityfrom an administrative point of view, and that it is possible to measure Service qualitythrough them, and that enable the organization to use the available resources and the ability to attract new resources to meet the needs for exceptional service.

In addition, the Supply Chainare linked with suppler response, which are increase the competitive advantage of the Supply Chainand thus lead to good organizational performance, the effective Supply Chainmanagement

practices reduced costs, enhance revenue, increase customer satisfaction, and improve the effective services delivery (Odhiambo,2014).

El-Shoghariand Abdallah (2016) in study stressed that the successful and integrated of Supply Chainwith its elements in the organization of its operations that is achieved high dramatic in improvements of the comprehensive performance, which include cost, quality and speed of service, and thus achieve customer service as a mechanism leading to increased market share and profits, the Supply Chainrelationships with the organization have a profound impact on customer service in all aspects, and the quality of this service can only be achieved through the effective management of successful Chain elements in a way that achieves customer satisfaction.

In summary, according to the above, the organizations rely on the management of their services with customers on the supply Chain active, which can be activated by the following elements Customer relationship,Technology and Tools,Performance Measurement,Supplier Intimacy,Resources. In addition, That the organization can achieve quality of service by the elements(Reliability, Responsiveness, Empathy, Tangibles), which are managed by the Supply Chainin the organization, this is confirmed in theory by the researcher in this chapter.

2-2 Previous Studies

Ahmad, et. al. (2009) study titled**"Development of a Service Quality Scale for Pharmaceutical Supply Chains",** aimed to develop a scale for the service quality measurement in pharmaceutical supply Chains. this study was in Pakistan and has used the analytical approach. The study used a sample of (413) pharmaceutical retailers working in the two biggest cities of Pakistan. The results showed that despite wide acceptance of the "American perspective" of service quality, the recommendation that service

quality measurement must be adapted to fit the context as there is no universal set of dimensions and items that determine the service quality across a section of industries and cultures.

Prakash (2011)study titled**"Service Quality in Supply Chain: Empirical Evidence from Indian Automotive Industry",** aimed to conceptualize the role of service quality in the manufacturing supply Chain. The study was conducted in India and has used the analytical approach. The study used a sample of (156) practitioners in three automobile-manufacturing companies in North India. The results showed that proposes linkages of service quality with loyalty, satisfaction, competitive advantage and organizational performance.

Saeedi (2011) study titled**"Supply Chain Management and Its Impact on Health Care Quality among Private Hospitals",** aimed to clarify the effect of supply Chain management on the quality of health services, in private hospitals in Jordan from the perspective of the procurement officials. The study used a sample of (301) employees in each of the departments of supply and procurement section distributors divided on (36) private hospital, in Jordan. The study tool has been prepared the questionnaire and used Statistical Package for Social Sciences (SPSS 16.1). The results showed an effect of the supply Chain management on the quality of health services. On the other hand, the results showed that gender, qualification, age, or experience had no effect on the quality of health services.

Nassiry et al. (2012)study titled **"Supply Chain Management and Service Quality in Malaysian Hotel Industry",** aimed to investigate the role of supply Chain management practices in enhancing service quality in the hotel industry in Malaysia. The study was conducted in Malaysia and has used the analytical approach. The study population consisted of all

hotels and motels in the city of Kuala Lumpur, while the study used a sample of (89) supply Chain managers, purchasing managers, procurement managers, and general. The study results showed that successful supply Chain management practices would lead to higher service quality. The results have also shown that strategic purchasing positively influences communication,suppliers' relationship, and service quality.

Al-Saa'da et al. (2013)study titled **"Supply Chain Management and Its Effect on Health Care Service Quality: Quantitative Evidence from Jordanian Private Hospitals",**aimed to explore and measure the effect of supply Chain management's dimensions on the quality of health services' dimensions in private hospitals in Jordan from the perspective of procurement officers and clarify the differences between supply Chain management and quality of health services due to some demographic variables. The study was conducted in Jordan and has used the quantitative approach. The study population consisted of (36) private hospitals in Jordan, while the study used a sample of (315) employees working in the departments of supply and procurement. The results showed that there is a significant effect of supply Chain management dimensions on the quality of health services. The results have also shown that there are no differences between supply Chain management and the quality of health services due to gender, qualification, age, or experience.

El-Saghierand Nathan (2013)study titled **"Service Quality Dimensions and Customers' Satisfactions of Banks in Egypt",** aimed to analyse service quality of banking services provided by banks in Egypt. The study was conducted in Egypt and has used the analytical approach. The study used a sample of (150) consumers. The results showed that there are four factors that influence users' evaluation of service quality of banking services. The study recommends that bank managers must have a

better understanding of customers' perception of service quality of banking and consequently of how to improve their satisfaction with respect to aspects of service quality.

Zhang and Hou (2013)study titled **"Measuring Service Quality of Supply Chain with SERVQUAL",** aimed to examine the service quality by using SERVQUAL scale. The study was conducted in China and has used the descriptive approach. The study used a sample of (350) customers of one local supply Chain company. The results showed that service offered by supply Chain is lagging far behind customers' expectation, especially in reliability and responsiveness dimensions.

Odhiambo (2014)study titled **"Supply Chain Management Practices and Service Quality among Public Hospitals in Nairobi County, Kenya"**, aimed to explore the Supply Chain Management practices in public hospitals in Nairobi County, the impact of these on service quality in public hospitals in Nairobi County and the challenges that public hospitals encounter in implementation of Supply Chain Management practices. The study was conducted in Kenya and has used the descriptive approach. The study used a sample of (7) public hospitals in Nairobi County, while the study used a sample of (199) employees from the seven Public Hospitals in Nairobi County. The results showed that Supply Chain Management practices implemented to a large extent were fully implemented was relationship with suppliers.

Yahyazadehand Omrani (2015)study titled **"Evaluating Supply Chain Management and its Impact on Service Quality Management in Tourism Industry",** aimed to evaluate supply Chain management and its impact on service quality management in tourism industry. The study was conducted in Iran and has used the descriptive explanatory approach. The study population consisted of all employees of West Azerbaijan Cultural

Heritage Organization in 2014. The results showed that different dimensions of supply Chain management (communication, cooperation, commitment, dependency, coordination and trust) have meaningful effect on quality of rendered services by Urmia Cultural Heritage Organization.

Assaf (2015) study titled**"The Effect of Supply Chain Capabilities on Achieving Competitive Advantage (A Case Study of The Kawar Companies Group in Jordan)**",aimed to investigate in "The Effect of Supply Chain Capabilities on Achieving Competitive Advantage". the researcher designed a questionnaire, the study used a sample of the returns were (96) questionnaires out from Kawar group companies. The Statistical Package for Social Sciences (SPSS) and statistical methods were used to analyseand examine the hypotheses, the main results of the study were: There was a strong impact of supply Chain capabilities (Integration with brokers and distributors) in achieving competitive advantage (Cost) .There was a strong impact of supply Chain capabilities (Integration with suppliers, integration with brokers and distributors, and integration with customers) in achieving competitive advantage (Quality). The main recommendations of the study were Kawar group in Jordan should involve major suppliers in the development and operations of services to them, which will reflect great importance in it.

El-Shoghariand Abdallah (2016)study titled"**The Impact of Supply Chain Management on Customer Service (A Case Study of Lebanon)**",have shown in this study to identify the supply Chain management and its impact on customer service, and explain the role of supply Chain management in sales improvement and identify the views of managers working in, this study was carried out at the industrial and commercial level, which is the most widely used supply Chain in Lebanon. The researcher used questionnaire by collecting data through a distributed

on the study sample, the researcher used the descriptive analytical method. The study population consists of employees working in toy companies in Lebanon, and their customers. (60) Questionnaires were distributed, (56) were answered; the result is Supply Chain management relationships with the company Have a profound impact on customer service in all aspects, and the quality of this service can only be achieved through successful management of string elements in the way customer satisfaction is achieved.

Frederico (2016)study titled **"Alignment between Supply Chain Management Practices and Maturity: A Framework Proposal",**aimed to present findings on supply Chain management maturity showing a theoretical model developed from the literature review and its application on three case studies, in three case studies from different segment of industry and with different level of maturity. Three companies were chosen based on that criterion. The interviewees were supply Chain managers and directors, who oversaw downstream and upstream flows of supply Chain. A qualitative approach was more adequate for this initial step aligned with this exploratory purpose. Recommended study, this theoretical model is unique taking into consideration that it was developed from various perspectives of maturity proposed on the literature. this same structure can be applied in more field researches seeking better understandings about maturity of SCM.

Ithiami (2016)study titled**"Factors that Influence the Perceived Quality of Service Delivery of the Kengen Supply Chain",** aimed to establish the factors that influenced the perceived quality of the service delivered by the KenGen Supply Chain department, in Kenya and has used the descriptive survey approach. The study population is (420) members of KenGen management staff, while the study used a sample of (122)

members. The results are that KenGen internal customers had very high expectations of the Supply Chain department's quality of service delivery, also shown that there are no differences between supply Chain management and the quality of health services due to gender, qualification, age, or experience. The study recommended that the Supply Chain department should implement a program to manage customers' expectations.

Miraz et al. (2016)study titled **"Supply Chain Management in Service Quality",**aimed to examine the role of supply Chain management practices in delivering attractive service quality in the Malaysian tourism industry. The study was in Malaysia and has used the analytical approach. The study used a sample of (190) supply Chain managers, purchasing managers, procurement managers, and general managers in motels and hotels in the city of Kuala Lumpur, Malaysia, while the study sample consisted of (87) managers. The results are that successful supply Chain management practices would yield to advanced facility and excellence. The study recommended that improving the business management upon maturity adaption of service supply Chain is needed.

Al-Muala (2016)study titled **"The Effect of Service Quality Dimensions on Customers' loyalty Through Customer Satisfaction in Jordanian Islamic Bank",** The objective of this study is to check the impact of the quality dimensions of banking services on customer satisfaction and customer loyalty. The dimensions include tangibility, reliability, empathy, responsiveness, and assurance. The researcher used a questionnaire to derive data from the study participants. Thesample included 250 questionnaires. Was distributed to several customers of the Islamic Bank in Jordan, the results of the study showed that there is a

positive impact on the ability to adapt, tangibility, reliability, empathy, responsiveness, and assurance to customer satisfaction towards customers. the researcher recommend that Jordanian Islamic Bank should focus more on Assurance and responsiveness dimensions to improve service quality to satisfy their customers' more as well as to enhance their buying decision of the bank service.

Mohammad, et al., (2016)study titled**"SERVICE QUALITY AND RURAL BANK CUSTOMER SATISFACTION IN ADAMAWA STATE, NIGERIAN.",**aimed to an attempt to assess customer satisfaction in rural areas, the population of the research work consist of all rural customers of money deposit banks in Adamawa state.The study used cluster rand om sampling techniques because the population is divided into three senatorial districts (Northern, southern and central districts), the sample size arrived 417 questionnaires were used. This study has analysed the customer satisfaction with rural bank customers using SERVQUAL model. The result indicated that customers are satisfied with four constructs (Tangibles, reliability, responsiveness and assurance) while empathy was not satisfied by customers. Despite the four-variable showed significant level of satisfaction by customers, there is need to improve on them and work seriously on empathy.

Vencataya et al., (2016)study titled **"Assessing the Impact of Supply Chain Management on Competitive Advantage and Operational Performance: A Case of Four-Star Hotels of Mauritius.",**aimed to discuss the impact of supply Chain management (SCM) on competitive advantage and operational performance with reference to the four-star hotels of Mauritius. A questionnaire was designed and administered to the managers of the four-star hotels of Mauritius, and out of the 56 four-star hotels of Mauritius, 34 participated in the survey yielding a response rate of

61%. The main result of this study corresponds to those of previous studies which show that SCM does have an impact on competitive advantage and operational performance. Recommended study is effective SCM practices should enhance substantially the competitive advantage and operational performance at four-star hotels in Mauritius. This study would be of relevance to other hotels which are implementing a system for managing their SCs. The practice of SCM could provide an avenue for enhancing the competitiveness of the hotel sector of Mauritius.

Ebaand Navjot (2017)study titled **"Role of Commodity Exchanges in Promoting Effective Supply Chain Management: Service Quality Perspective, Case of Eacwse, Ethiopia",**aimed to investigate the Role of Commodity Exchanges in Promoting Effective Supply Chain Management: Service Quality Perspective, case of ECOWSE Gimbi branch. The study was conducted in Ethiopia and has used the explanatory approach. The population of over (100,000) coffee farmers, over (500) traders and exporters, and (30) employees of ECOWSE, while the study used a sample of (500) respondents. The results showed that there is a lack of service quality beyond the wall of the ECOWSE. The study recommended structural change to extend the service to the grass root level coffee supply Chain-coffee producer farmers.

Ombwayoand Atambo, (2017) study titled **"Effects of Supply Chain Quality Management Practices on Performance of SACCOs in Nakuru County, Kenya",** have shown the main objective of this study was to establish the effects of supply Chain quality management practices on the performance of SACCOs in Nakuru County. The study targeted the procurement officers, credit officers, Human resource managers and finance managers at the 15 SACCOs in Nakuru County. Primary data was

gathered through administration of open and closed ended structured questionnaires to respondents. This study adopted a descriptive study research design in that it enables generalization of research findings to a much larger population, consequently quantitatively analysed via usage of both inferential and descriptive statistics to produce meaningful output. The researcher targeted the management (41) staff were dully filled and returned. The result is the study found out that SACCOs had identified overall best practices for their operations, which they can adopt, and this had provided information necessary for optimal results, the study recommendedcould conduct researchin all the registered SACCOs in Kenya to find outthe effects of supply Chain quality managementpractices on the performance for generalization.

2-3: Distinguished Aspects of this Study

The study derives its Distinguished Aspects from:

The Theoretical Distinguished Aspects

1. The previous studies, it was clear that some studies have addressed the topics of supply Chainand service quality. In addition, these studies were conducted in different societies of different size and nature, while the current study is conducted in Jordan.
2. supply Chain concept: This study may increase awareness about the role of supply Chain in activating service quality.
3. Purpose: Most of the previous studies were conducted to analyse and investigate supply Chain on service quality not activation. While this study was carried out to study the effect of supply Chain activation elements on service quality in organizations.

The Practical Distinguished Aspects

1. Environment: Most of the previous studies were executed out of the Foreign countries while this study will be executed in one of the Middle-Eastern countries (Jordan).
2. Population: Most previous studies samples targeted employees and /or customers of the organizations, while this study targeted managers and employee.
3. Methodology: Most researches depended on reports from different organizations and industries, while this study depends on perception.
4. Comparison: The results of this study will compare to the previous studies results mentioned earlier to highlight differences and similarities that might be there.

Chapter Three: Methods and Procedures

3.1 Study Design

This study is descriptive as well as cause/effect. Its purpose is to investigate the effect of supply Chain activation on service quality at Jordan Telecommunication Organizations. The study starts by reviewing previous studies to select the model, and build the questionnaire, which was developed through panel of judges. Then data have been collected from all managers and employees working at these companies via the questionnaire. After checking the suitability and completeness of the collected questionnaires, the data were coded against SPSS 23. After assuring the data normality, validity, reliability and correlation, the effect of the independent variable on dependent variable was tested through multiple regressions.

3-2: Study Population, Sample, and Unit of Analysis

Study population and sample: There are only three Telecommunication companies in Jordan: Orange, Umniahand Zain. these companies were targeted; therefore, there is no need for sampling. Units of analysis are including the managerand supervisorsworking at Jordanian Telecommunication Companies.

3-3: Data Collection Methods (Tools):

The data that is used for fulfilling the purposes of the study can be divided into two groups: secondary and primary data as follows:

Secondary data: the researcher relied from books, periodicals, references theses and articles that are related the study directly and indirectly, to find out the modern scientific foundations associated with the current study, which helped build the theoretical framework for the study.

Preliminary data: The questionnaire is used as a primary source of data collection, which was developed purposely for this study.

Study Tool:Questionnaire

The initial items were developed to measure different data based on previous studies. Then developed based on referee committee (Appendix 1)

The questionnaire is consisting of two parts:

- **Part I**: Demographic characteristics: gender, age, experience, qualification, position, and name of organization.

- Part II: Part two consists of two sections: Independent variable (Supply Chain Activation), which includes Customer relationship, Technology and Tools, Performance Measurement, Supplier Intimacy, and Resources. Each sub-variable will be measured by 6 items. Dependent variable (Service Quality), which includes Reliability, Responsiveness, Empathy, and Tangibles. Each dimension measured by 6 items.

All items were measured by a 5 Likert scale, which consists of five points to test respondents' perceptions, ranging from 1 (strongly disagree) to 5 (strongly agree).

Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
1	2	3	4	5

3-4 Data Analysis Methods:

The Telecommunication companies in Jordan were targeted and the questionnaires were distributed to All managers and supervisors, Jordan Telecommunication companies working in these companies and were available at the time of implementing this study. A hundred fifty questionnaires were distributed to 180 managers and supervisors out of 187, seven managers and supervisors were out of reach. And only 175 questionnaires were suitable for analysis, while 5 questionnaires were eliminated because of uncompleted or anomalies data. After that, the data were coded against SPSS 23 for further analysis.

Validity*:* Two methods were used to test the questionnaire for validityand to provide a coherent study questionnaire; **first**, content validitymultiple sources of data such as (journals, researches, theses, worldwide web, and articles) were used to set and refine the model and the measures. **Second**, a face validity review that covers all the study constructs was thoroughly performed by the academic arbitrators from Middle East University and other universities specialized faculty and practitioners in business administration, and marketing. Some items were added while others were dropped based on their valuable recommendations. As other items were reformulated to become more accurate to enhance and modify the study instrument. The academic Arbitrators were (4), (see appendix "1").

Reliability test: A reliability test was carried out using Cronbach's alpha, to measure the internal consistency of the study instrument (Questionnaire) as well as the stability. It indicates the extent to which it is without bias or error and hence ensures consistent measurement across the various items in the instrument.

Table (3-1) shows the Cronbach' Alpha value which rang (0.81 – 0.89), and total questionnaire items was (0.97),

Table (3-1) Reliability Analysis of the Study Scales

No.	Variables		Cronbach' Alpha value
1	**Supply Chain Activation**	Customer relationship	0.85
2		Technology and Tools	0.89
3		Performance Measurement	0.85
4		Supplier Intimacy	0.84
5		Resources	0.85
6	**Service Quality**	Reliability	0.84
7		Responsiveness	0.81
8		Empathy	0.83
9		Tangibles	0.85
Total			0.97

It can be seen from the table (3-1) the results showed a value of (0.97) for the all items, which is good indicator because it is greater than the accepted percent (0.60) (Sekaran, 2013). The internal consistency reliability was very good and acceptable, it also can be reliable to achieve the research objectives.

Demographic Analysis: this section includes demographic dimensionsdescription (frequency and percentage) of participants related to age, gender, qualification, Years of experience,Job position, and Name of Organization.

Table (3-2) Frequency and Percent for thePersonaland Functional Variables

Variable	Category	Frequency	Percent %
Gender	Male	130	74.3
	Female	45	25.7
	Total	175	100.0

Variable	Category	Frequency	Percent %
Age	From 20 - less than 26	13	7.4
	From 26 - less than 31	36	20.6
	From 31 – less than 36	71	40.6
	From 36 - less than 41	32	18.3
	41 – and more	23	13.1
	Total	175	100.0
Scientific qualification	Diploma and less	5	2.9
	Bachelor	125	71.4
	Master	45	25.7
	Total	175	100.0
Years of experience	5 years- and less	9	5.1
	From 6-less than 10	58	33.1
	From 11-less than	54	30.9
	From 15 - 19	35	20.0
	20- andmore	19	10.9
	Total	175	100.0
Job position	Department Manage	4	2.3
	Employee	84	50.9
	Another Position	82	46.9
	Total	175	100.0
Name of Organization	Zain	65	37.1
	Orange	45	25.7
	Umnia	65	37.1
	Total	175	100.0

Table (3-2) shows:

Gender: the highest category (Male) by frequency (130) percentage (74.3%), but the lowest category (Female) by frequency (45) percentage (25.7%).

2- For Age variable, the highest category (From 31 – less than 36) by frequency (71) percentage (40.6%), but the lowest category (From 20 - less than 26) by frequency (13) percentage (7.4%).

3- For Scientific qualification variable, the highest category (Bachelor) by frequency (125) percentage (71.4%), but the lowest category (Diploma and less) by frequency (5) percentage (2.9%).

4- For Years of experience variable, the highest category (From 6-less than 10) by frequency (58) percentage (33.1%), but the lowest category (5 years- and less) by frequency (9) percentage (5.1%).

5- For Job position variable, the highest category (Employee) by frequency (89) percentage (50.9%), but the lowest category (Department Manage) by frequency (4) percentage (2.3%).

6- For Name of Organization variable, the highest category (Zain andUmnia) by frequency (65) percentage (37.1%), but the lowest category (Orange) by frequency (45) percentage (25.7%).

Chapter Four: Results and Hypotheses Testing

4-1 Introduction

This chapter includes three sections: descriptive analysis, correlation between variables and multiple regressions to test the relationship between independent variables and dependent variable.

4-2 Descriptive Analysis of Study Variables

This section includes the means, standard deviation, ranking and importance of each sub-variable and each item. The importance is divided into three categories: low, medium, and high, based on the following equation:

$$\text{Class Interval} = \frac{maximum\ class - minmum\ class}{number\ of\ classes}$$

$$\text{Class Interval} = \frac{5-1}{3} = 1.33$$

The Low degree less than 2.33

The Median degree from 2.34 – 3.66

The High degree from 3.67 and above.

What is the extent of activation of the supply Chain in Jordanian telecommunication companies?

Variable one: Supply Chain

Table (4-1): Means and Standard Deviations for Each Variable

No.	Statement	Mean	S.D.	Ranking	Importance
5	Resources.	3.67	0.78	1	High
1	Customer relationship.	3.65	0.86	2	Moderate
4	Supplier Intimacy.	3.65	0.75	3	Moderate
3	Performance Measurement	3.39	0.84	4	Moderate
2	Technology and Tools.	3.31	0.96	5	Moderate
Total		3.53	0.761	---	Moderate

Table (4-1) shows that the means of supply Chain sub-variables ranges from 3.67 to 3.31, with standard deviation between 0.78and 0.96, which means that respondents agree on medium to high importance of

supply Chainsub-variables. The average mean for supply Chain sub-variables is 3.53 with standard deviation of 0.761, which means that the respondents agree on medium implementation of supply Chain.

1- Customer relationship

Table (4-2): Means and Standard Deviations for Each Itemof Customer Relationship Level

No.	Statement	Mean	SD	Ranking	Importance
1	The organization solves customers complaints effectively.	4.05	0.934	1	High
2	The organization develops long-term relationships with customers.	3.93	0.824	2	High
3	The organization provides excellent services.	3.6	1.017	3	Moderate
5	The organization surveys the views of customers to identify their tastes and appetites to satisfy their needs.	3.59	1.228	4	Moderate
6	The organization has on good treatment with the customer.	3.39	1.268	5	Moderate
4	The organization has channels to communicate the customers.	3.35	1.351	6	Moderate
Total		3.65	0.856	---	Moderate

Table (4-2) shows that the means of Customer relationship ranges from 4.05 to 3.35, with standard deviation between 0.934 and 1.351, which means that respondents agree on high to medium importance of Customer relationship. The average mean for Customer relationship is 3.65 with standard deviation of 0.856, which means that the respondents agree on medium implementation of Customer relationship.

2- Technology and Tools

Table (4-3) shows that the means of Technology andTools ranges from 3.65 to 2.87, with standard deviation between 1.304and 1.262, which means that respondents agree on medium importance of Technology and Tools. The average mean for Technology and Tools is 3.31 with standard deviation of 0.964, which means that the respondents agree on medium implementation of Technology and Tools.

Table (4-3): Means and Standard Deviations for Each Itemof Technology and Tools Level

No.	Statement	Mean	SD	Ranking	Importance
5	The organization has modern software programs (reservations, customers records, bills, orders, etc.).	3.65	1.304	1	Moderate
6	The organization provides modern technology in services according to customers' demands.	3.51	1.119	2	Moderate
1	The organization has visually appealing buildings,	3.38	1.132	3	Moderate
4	Employees of the organization appear neat and tidy (as uniforms and personal grooming).	3.26	1.192	4	Moderate
3	The organization has modern looking equipment (air conditioner, furniture, elevator, etc.).	3.21	1.168	5	Moderate
2	The organization has visually appealing facilities,	2.87	1.262	6	Moderate
Total		3.31	0.964	---	Moderate

3- Performance Measurement

Table (4-4) shows that the means of Performance Measurement ranges from 3.68 to 3.23, with standard deviation between 1.088and1.101, which means that respondents agree on high to medium importance of Performance Measurement. The average mean for Performance Measurement is 3.39 with standard deviation of 0.838, which means that the respondents agree on medium implementation of Performance Measurement.

Table (4-4): Means and Standard Deviations for Each Itemof PerformanceMeasurementLevel

No.	Statement	Mean	SD	Ranking	Importance
2	The organization has the customer needs control by system.	3.68	1.088	1	High
6	The organization performs the right services at the first time.	3.61	0.94	2	Moderate
1	The organization has own Supply Chain system.	3.31	1.259	3	Moderate
4	the organization has demand results indicators system,	3.27	1.029	4	Moderate
3	the organization has customer services tracking system,	3.23	1.234	5	Moderate
5	the organization has production results indicators system,	3.23	1.101	6	Moderate

No.	Statement	Mean	SD	Ranking	Importance
Total		3.39	0.838	---	Moderate

4- Supplier Intimacy.

Table (4-5) shows that the means of Supplier Intimacy ranges from 3.37 to 4.05, with standard deviation between 0.689 and 1.144, which means that respondents agree on high tomedium importance of Supplier Intimacy.

Table (4-5): Means and Standard Deviations for Each Item of Supplier Intimacy Level

No.	Statement	Mean	SD	Ranking	Importance
1	The organization expects the long-time relationship with key suppliers.	4.05	0.689	1	High
2	The organization develops a partnership program with our key suppliers.	3.77	0.82	2	High
3	The organization involves their suppliers in the organization strategic planning process.	3.65	1.082	3	Moderate
4	The organization views the suppliers as an integrated part of the supply Chain.	3.55	1.133	4	Moderate
6	The organization cooperates with key suppliers to improve the supply Chain quality.	3.37	1.025	5	Moderate
5	The organization exchanges information with key suppliers.	3.52	1.144	6	Moderate
Total		3.65	0.749	----	Moderate

The average mean for Supplier Intimacy is 3.65 with standard deviation of 0.749, which means that the respondents agree on medium implementation of Supplier Intimacy.

5- Resources.

Table (4-6) shows that the means of Resources ranges from 3.86to 3.45, with standard deviation between 0.807and 1.143, which means that respondents agree between high tomedium importance of Resources. The average mean for Resources is 3.67 with standard deviation of 0.782, which means that the respondents agree on high implementation of Resources.

Table (4-6): Means and Standard Deviations for Each Itemof ResourcesLevel

No.	Statement	Mean	SD	Ranking	Importance
2	The supply chain has a high utilization of machines and facilities.	3.86	0.807	1	High
3	The supply chain has a high utilization of transportation vehicles.	3.83	0.961	2	High
4	The supply chain has a high utilization of waste is minimized.	3.68	0.959	3	High
1	The supply chain has a strong focus on core competences.	3.63	1.132	4	Moderate
6	The supply chain renews constantly their sources.	3.57	1.142	5	Moderate
5	The supply chain can manage an unexpected large increase in demand.	3.45	1.143	6	Moderate
Total		3.67	0.782	---	High

Variable Two: Service Quality

What is the extent of Service Quality in Jordanian telecommunication companies?

Table (4-7): Means andStandard Deviations for Each Variable

No.	Statement	Mean	SD	Ranking	Importance
3	Empathy.	3.91	0.707	1	High
4	Tangibles.	3.83	0.737	2	High
2	Responsiveness.	3.8	0.7	3	High
1	Reliability.	3.59	0.82	4	Moderate
Total		3.78	0.649	----	High

Table (4-7) shows that the means of Service Quality sub-variables ranges from 3.91 to 3.59, with standard deviation between 0.707 and0.82, which means that respondents agree medium to high importance of service Quality sub-variables. The average mean for service Quality sub-variables is 3.78 with standard deviation of 0.649, which means that the respondents agree on high implementation of service Quality.

1- Reliability

Table (4-8) shows that the means of Reliabilityranges from 3.80 to 3.29, with standard deviation between 1.096and1.217, which means that respondents agree high to medium importance of Reliability. The average mean for Reliability is 3.80 with standard deviation of 0.700, which means that the respondents agree on medium implementation of Reliability.

Table (4-8): Means andStandard Deviations for Each Item of ReliabilityLevel

No.	Statement	Mean	SD	Ranking	Importance
1	The organization promises to do something by a certain time, they do.	3.80	1.096	1	High
2	The organization shows a sincere interest in solving the customer's problems.	3.70	1.229	2	High
6	The organization insist on error free records.	3.69	1.065	3	High
5	The organization follows up consistently performance result.	3.57	0.881	4	Moderate
4	The organization provides the service at the time they promise to do so.	3.51	1.011	5	Moderate
3	The organization provides the service right the first time.	3.29	1.217	6	Moderate
Total		3.80	0.700	---	High

2- Responsiveness

Table (4-9) shows that the means of Responsiveness ranges from 4.17 to 3.49, with standard deviation between 0.754 and 1.113, which means that respondents agree high to medium importance of Responsiveness. The average mean for Responsiveness is 3.80 with standard deviation of 0.700, which means that the respondents agree on high implementation of Responsiveness.

Table (4-9): Means andStandard Deviations for Each Itemof ResponsivenessLevel

No.	Statement	Mean	SD	Ranking	Importance
5	The organization uses modern technology to respond to customers' request.	4.17	0.754	1	High
6	The organization Employees are trainers for respond to customers' request.	4.14	0.862	2	High
4	The organization Employees are never too busy to respond to customers' request.	3.77	0.969	3	High
1	The organization Employees tell customers when service will be performed.	3.66	0.975	4	Moderate
3	The organization Employees give prompt service to customers.	3.59	1.11	5	Moderate
2	The organization Employees are always willing to help customers.	3.49	1.113	6	Moderate
Total		3.80	0.700	---	High

3- Empathy

Table (4-10) shows that the means of Empathy ranges from 3.98 to 3.81, with standard deviation between 0.881 and 1.002, which means that respondents agree high importance of Empathy. The average mean for Empathy is 3.91 with standard deviation of 0.707, which means that the respondents agree on high implementation of Empathy.

Table (4-10): Means and Standard Deviations for Each Itemof EmpathyLevel

No.	Statement	Mean	SD	Ranking	Importance
2	The organization have operating hours convenient to all customers.	3.98	0.881	1	High
6	The organization Employees understand the specific needs of our customers.	3.97	0.999	2	High
5	The organization always share their interests with customers.	3.94	0.945	3	High
1	The organization always give customers individual attention.	3.9	0.871	4	High
4	The organization takes into consideration customer conditions.	3.86	0.993	5	High
3	The organization have customer best interest at heart.	3.81	1.002	6	High
Total		3.91	0.707	----	High

4- Tangibles

Table (4-11): Means and Standard Deviations for Each Itemof TangiblesLevel

No.	Statement	Mean	SD	Ranking	Importance
2	The physical facilities at our organization are visually appealing,	3.93	0.953	1	High
6	The organization gives the freebies service for customers.	3.92	0.985	2	High
5	The organization gives the gifts for customers,	3.9	1.034	3	High
3	Employees at our organization are neat in appearance,	3.88	0.899	4	High
1	The organization has modern technology,	3.83	1.008	5	High
4	Materials associated with the service at our organization are visually appealing,	3.51	0.993	6	Moderate
Total		3.83	0.737	---	High

Table (4-11) shows that the means of Tangibles ranges from 3.93 to 3.51, with standard deviation between 0.953 and 0.993, which means that respondents agree high importance of Tangibles. The average mean for Tangibles is 3.83 with standard deviation of 0.737, which means that the respondents agree on high implementation of Tangibles.

4-3: Relationship between Variables:

Bivariate Pearson Principal Components analysis was carried to test the correlation among sub-variables and between the main variables. Table (4-12) shows the relationship among Supply Chain sub-variables are strong, where r ranges between 0.664 and 0.897.While the relationship among Service Quality-variables are strong, where r ranges between 0.641 and 0.796. where the relationship between supply Chain andService Qualityare very strong, where r is 0.866.

Table (4-12):Bivariate Pearson Correlation (r) Matrix BetweenIndependent and Dependent Variables.

No.		1	2	3	4	5	6	7	8	9	10	11
1	Customer relationship											
2	Technology and Tools	.897**										
		.000										
3	Performance Measurement	.744**	.825**									
		.000	.000									
4	Supplier Intimacy	.798**	.840**	.757**								
		.000	.000	.000								
5	Resources	.738**	.727**	.664**	.778**							
		.000	.000	.000	.000							
6	Supply Chain	.925**	.952**	.882**	.916**	.855**						
		.000	.000	.000	.000	.000						
7	Reliability	.752**	.800**	.670**	.821**	.667**	.819**					
		.000	.000	.000	.000	.000	.000					
8	Responsiveness	.678**	.753**	.714**	.766**	.727**	.801**	.796**				
		.000	.000	.000	.000	.000	.000	.000				
9	Empathy	.533**	.603**	.644**	.630**	.638**	.670**	.641**	.680**			
		.000	.000	.000	.000	.000	.000	.000	.000			
10	Tangibles	.588**	.707**	.653**	.744**	.644**	.734**	.643**	.709**	.659**		
		.000	.000	.000	.000	.000	.000	.000	.000	.000		
11	Service Quality	.733**	.821**	.765**	.849**	.764**	.866**	.888**	.908**	.846**	.858**	
		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

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

4-4 Hypotheses Testing:

After confirming validity and reliability of the tool, and confirming the correlation between independent and dependent variables, the following assumptions should be proved.

Multi-Collinearity: While, VIF (Variance Inflation Factor) and tolerance are used to testmulti-collinearity. If VIF is less than 10 and tolerance is more than 0.1, themulti-collinearity model does not violate this assumption.

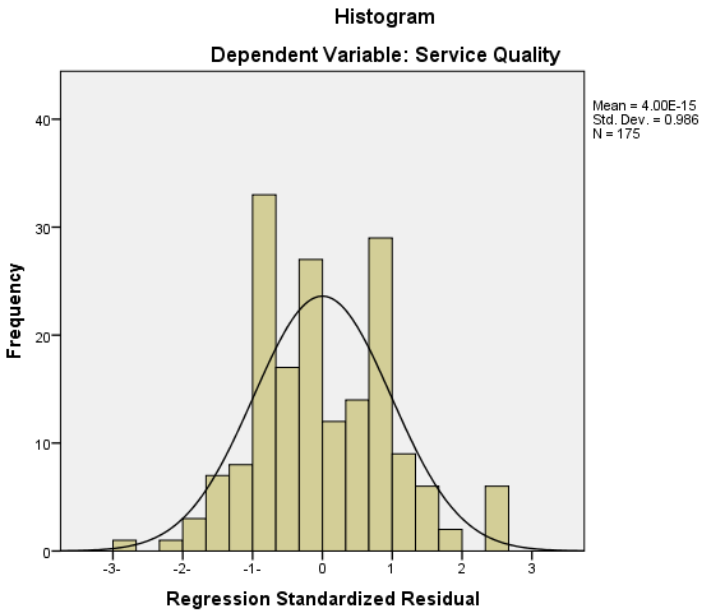
Table (4.13): Multi-collinearity and Durbin-Watson Test.

Sub-Variables	Collinearity Statistics		Durbin-Watson
	Tolerance	VIF	
Customer relationship	0.178	5.626	2.109
Technology and Tools	0.124	8.051	
Performance Measurement	0.302	3.308	
Supplier Intimacy	0.229	4.376	
Resources	0.354	2.825	

Table (4.16) shows that the VIF values are less than 10 and the tolerance values are more than 0.10. This indicates that there is no multi-collinearity within the independent variables of the study.

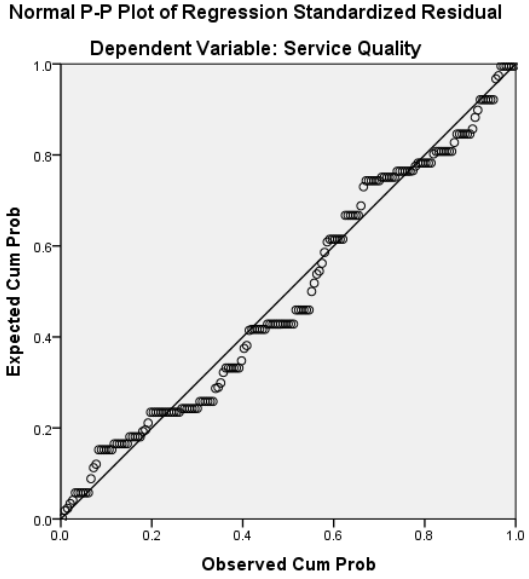
Normal Distribution (Histogram): The histogram in figure (4-1) shows that the data were normality distributed, since the residuals do not affect the normal distribution.

Figure 4-1: Normal Distribution



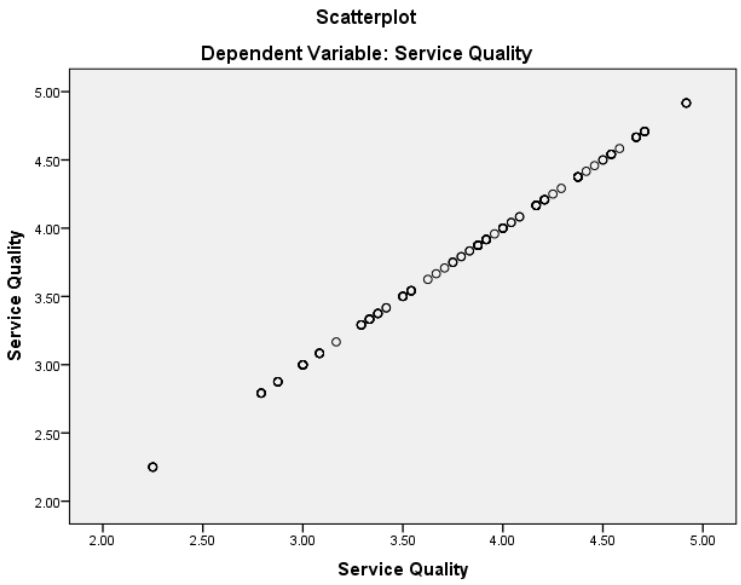
Linearity Test: Figure (4-2) shows that the relationship between independent and dependent variables is linear.

Figure 4-2: Linearity Test



Independence of Errors: Figure (4-3) shows that the errors are scattered around the mean, therefore independence of errors is assumed.

Figure 4-3: Scattered Plot



Durbin-Watson used to ensure independence of errors, If Durbin-Watson test value is about 2 the model does not violate this assumption.Table (4.13) shows that Durbin Watson value is (d=2.109), which is about two and shows that the residuals are not correlated to each other; therefore, the independence of errors is not violated.

Multiple Regressions:

H_{01}: The Supply ChainActivation do noteffecton Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.14) shows that when regressing the five independent variables of total Supply Chain together against dependent variable Service Quality. R2 shows the fitness of the model for multiple regressions and explains the variance of independent variable on dependent variable. Since R2 is 79.2% then the independent variable can explain 0.792% of variance on dependent variable, since (R2=0.792, F=128.729, Sig.=0.000).

Consequently, the null hypothesis is rejected,and the alternativehypothesis is accepted, which states that the Supply Chain Activation effect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.14): Results of Multiple Regressions Analysis (ANOVAa):Regressing Supply Chain Activation Sub-Variables againstService Quality.

Model	R	R^2	Adjusted R^2	F	Sig.
1	0.890[a]	0.792	0.786	128.729	0.000[b]

a. Predictors: (Constant), Resources, Performance Measurement, Customer relationship, Supplier Intimacy, Technology and Tools
b. Dependent Variable: Service Quality

Table (4.15) shows the effect of each independent of Supply Chain Activation sub-variable ondependent of Service Quality variable.

Table (4.15): Results of Multiple Regressions Analysis (Coefficientsa):Regressing Supply Chain Activation Sub-Variables againstService Quality.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.144	0.132		8.638	0.000
	Customer relationship	-.165-	0.063	-0.217-	-2.610-	0.010
	Technology and Tools	0.258	0.067	0.383	3.846	0.000
	Performance Measurement	0.114	0.049	0.147	2.310	0.022
	Supplier Intimacy	0.358	0.064	0.413	5.625	0.000
	Resources	0.189	0.049	0.227	3.852	0.000

a. Dependent Variable: Service Quality

Sub-Hypothesis:

$H_{01\text{-}1}$: The Customer Relationship doesnoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.15) shows that there is no significant effect of Customer Relationship on Service Quality, since (Beta=-0.217, t=-2.610, sig.=0.010, p>0.05). Therefore, the null hypothesis is accepted which states that Customer Relationship does not affect Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

H_{01-2}: The Technology and Tools donoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.15) shows that there is no significant effect of Technology and Tools on Service Quality, since (Beta=0.383, t=3.846, sig.=0.000, p>0.05). Therefore, the null hypothesis is accepted which states that Technology and Tools do not affect Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

H_{01-3}: The Performance Measurement do noteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.15) shows that there is no significant effect of Performance Measurement on Service Quality, since (Beta=0. 147, t=2.310, sig.=0.022, p>0.05). Therefore, the null hypothesis is accepted which states that Performance Measurement do not effectService Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

H_{01-4}: The Supplier Intimacy do noteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.15) shows that there is no significant effect of Supplier Intimacy on Service Quality, since (Beta=0.413, t=5.625, sig.=0.000, p>0.05). Therefore, the null hypothesis is accepted which states that Supplier Intimacy do not affect Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

H_{01-5}: The Resources donoteffect on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Table (4.15) shows that there is no significant effect of Resources on Service Quality, since (Beta=0.227, t=3.852, sig.=0.000, p>0.05). Therefore, the null hypothesis is accepted which states that Resources do not affect Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Chapter Five: Conclusion and Recommendations

5-1 Introduction:

Considering the analysis conducted in Chapter 4 of the results of descriptive statistical analysis of the study variables and hypothesis testing, in this chapter the questions presented in the first chapter will be answered and presented to all the findings of the researcher in his study. Based on these results, the researcher presented several recommendations and suggestions.

5.2: Discussion of the Descriptive Results of the Study Variables

Supply Chain Activation

The study showed that the extent of activation of the supply Chain in the Jordanian telecom companies is moderate.The following discussion of sub-themes of the supply Chain activation variables as the most important:

In that first rank Resourcesthat involves marketing communications, sales support, technical assistance and customer service, in terms of importance through has a high utilization of machines and facilities, has a strong focus on core competences, has a high utilization of transportation vehicles, renews constantly their sources, andcan manage an unexpected large increase in demand. This result is agreed with the study (Ombwayo,2017), but disagreed with the study of (Fredericoand de Souza,2017) that is Low.

In the second rank is Customer relationship that actions that enable organization to build the benefits greater with supplier’s intimacy for a business, in terms of importance through solves customers complaints effectively, has a moderate in channel to communicate the customers, has a moderate in treatment with the customer, a moderate has a moderate in

develops long-term relationships with customers, has a moderate in provides excellent services, and surveys the views of customers to identify their tastes and appetites to satisfy their needs. This result is disagreed with the study(Fredericoand de Souza,2017), and (Assaf,2015), whileagreed with the study (Ombwayo,2017) that is Moderate.

In the third rank is Supplier Intimacy that has a moderate in a physical object such as facilities, buildings or equipment, and a technical object such as a web authoring tool, hardware or software program, their suppliers in the organization strategic planning process, expects the long-time relationship with key suppliers, develops a partnership program with our key suppliers, views the suppliers as an integrated part of the supply Chain, and cooperates with key suppliers to improve the supply Chain quality. This result is disagreed with the study (Nassiry et al.,2012), but agreed with the study of (Assaf,2015), and (Ombwayo,2017) that are Moderate.

In the fourth rank is Performance Measurement that has a moderate in an economic or productive factor, that is used to accomplish an activity, has own Supply Chain system, has the customer needs control by system, performs the right services at the first time, and has customer services tracking system. This result is agreed with the study (Ombwayo,2017), but disagreed with the study of (Fredericoand de Souza,2017) that is Low.

In the last rank is Technology and Tools that has a moderate in enable organization to build the benefits greater with supplier's intimacy for a business, has modern software programs, has visually appealing buildings, has modern looking equipment, employees of the organization appear neat and tidy, has visually appealing facilities, and provides modern technology in services according to customers' demands. This result is

disagreed with the study (Ombwayo,2017), but agreed with the study of (Fredericoand de Souza,2017) that is Moderate.

What is the extent of Service Quality in Jordanian telecommunication companies?

The study showed that the extent of service quality in the Jordanian telecom companies is a high,The following discussion of sub-themes of the service quality variables as the most important

In the first rankisReliability that capable of organization to own material or substantial things, has a high in terms of importance through that promises to do something by a certain time, they do, shows a sincere interest in solving the customer's problems, provides the service right the first time, andfollows up consistently performance result, provides the service at the time they promise to do so. This result is agreed with the study (El-Saghier, 2015), (Beniusiene,2012), and (Al-Azzam, 2015), but disagreed with the study of (MAMO,2015) that is Low.

In the second rank is Responsiveness that ability of a business to recognize and respond to changing customer needs, has a high in terms of importance through that Employees are never too busy to respond to customers' request, are trainers for respond to customers' request, are always willing to help customers, give prompt service to customers, and tell customers when service will be performed. Uses modern technology to respond to customers' request. This result is agreed with the study (El-Saghier, 2015), and (Al-Azzam, 2015), but disagreed with the study of (MAMO,2015) that is Low.

In the third rank is Empathyability of an organization to consistently perform its intended or required function or mission. Has a high in terms of importance through always give customers individual attention, have operating hours convenient to all customers, have customer best interest at

heart, understand the specific needs of our customers, takes into consideration customer conditions. This result is agreed with the study and(Al-Azzam, 2015) but disagreed with the study of (El-Saghier, 2015), and (MAMO,2015) that are Moderate.

In the fourthrank is Tangiblesthat ability of an organization to share customers' attentions, needs, So, has a moderate in terms of importance through that gives the gifts for customers, gives the freebies service for customers, Materials associated with the service at our organization are visually appealing, employees are neat in appearance, has modern technology, the physical facilities are visually appealing. This result is agreed with the study (El-Saghier, 2015), and (Al-Azzam, 2015), but disagreed with the study of (MAMO,2015) that is Low.

5-3 Discuss the results of hypotheses

The results show: The Supply Chain Activation effect on Service Quality, and a correlation coefficient between the elements is strong, that means the changes in the impact Service Quality, resulting from changes in the Supply Chain Activation, there is impact of the Supply Chain Activation on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Show the Customer Relationship effect on Service Quality, and a correlation coefficient between the elements is strong, that means the changes in the impact Service Quality, resulting from changes in the Customer Relationship, there is impact of Customer Relationship on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Show the Technology and Tools effect on Service Quality, and a correlation coefficient between the elements is very strong, that means the changes in the impact Service Quality, resulting from changes in the

Technology and Tools, there is impact of Technology and Tools on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Show the Performance Measurement effect on Service Quality, and a correlation coefficient between the elements is very low, that means the changes in the impact Service Quality, resulting from changes in the Performance Measurement but this change is low, there is impact of Performance Measurement on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Show the Supplier Intimacy effect on Service Quality, and a correlation coefficient between the elements is very strong, that means the changes in the impact Service Quality, resulting from changes in the Supplier Intimacy, there is impact of Supplier Intimacy on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

Show the Resources effect on Service Quality, and a correlation coefficient between the elements is strong, that means the changes in the impact Service Quality, resulting from changes in the resources, and there is impact of Resources on Service Quality of Telecommunication companies, at ($\alpha \leq 0.05$).

5-4 Conclusion

The result shows that there is no a significant implementation of The Supply Chain Activation among Telecommunication companies in Jordan. This indicates that the managers and employee working at Telecommunication companies in Jordan need to aware of the importance of the implantation of The Supply Chain Activation variables.

The results also show that the relationships among Supply Chain Activation sub-variables are strong to very strong; the relationships between Service Qualitydimensions are strong to very strong. Moreover, the relationships betweeneach Supply Chain Activation sub-variables with

Service Quality together are strong to very strong which means that the relationship between the Supply Chain Activation and total Service Quality dimensions is very strong.

Finally, the Simple regressions analysis shows that the Supply Chain Activation sub-variable together affect the Service Quality.

5-5 Recommendations

Based on the current study results, the study presents the following recommendations for Telecommunication companies in Jordan:

- The current study recommends the companies to activate The Supply Chain as a tool and technique to gain and maintain Service Quality.
- The study shows that the reliability empowerment is the important factor of Service Quality while it is the last one in the degree of implementation list in Jordan Telecommunication companies. Therefore, the companies are advised to give reliability empowerment more attention according to the value of its implementation.
- The study is directed to Telecommunication industry. Further studies are needed to investigate whether the study findings can be generalized to other industries.
- Finally, this study was conducted on Jordan companies, which makes generalizing its findings to other countries questionable. Therefore, similar studies in different countries are recommended to be carried out especially in Arabs countries.
- Make other studies of the same variables in industrial companies in Jordan.

References

Adeleke, M. S. (2013). Measuring Quality of Service of Rural Banks in Oyo State, *IOSR* **Journal of Business and Management** *(IOSR-JBM),* 9(1),22-30.

AftabYahyazade, J., Sarwar, H., Sultan, Q., and Qadeer, M. (2016). Importance of Service Quality in Customer Satisfaction (A Study on Fast Food Restaurants). **Entrepreneurship and Innovation Management Journal**, 4 (4),161-171.

Ahmad, N., Usman Awan, M., Raouf, A., and Sparks, L. (2009). Development of a Service Quality Scale for Pharmaceutical Supply Chains. **International Journal of Pharmaceutical and Healthcare Marketing**, 3 (1), 26-45.

Al Muala, A. (2016). The Effect of Service Quality Dimensions on Customers' loyalty Through Customer Satisfaction in Jordanian Islamic Bank. **Economic and Social Development: Book of Proceedings,** 348.

Al-Azzam, A. (2015). The Impact of Service Quality Dimensions on Customer Satisfaction: A Field Study of Arab Bank in Irbid City, Jordan. **European Journal of Business and Management**, 7 (15), 45-53.

Albarazi, T.D. (2012).**The impact of supply Chain management on the organization's performance**,(Unpublished Master Thesis), of degree requirements, College Business school, Middle East University, Jordan.

Alrfie, A.A. (2016). “The success factors of supply Chain management andits role in improving the performance of operations in the case of oil refinery study in Najaf Ashraf”, Research Paper, **Journal of Management and Economics**, vol. III, No. 12, Iraq.

Al-Saa'da, R., Taleb, Y., Al Abdallat, M., Al-Mahasneh, R., Nimer, N., and Al-Weshah, G. (2013). Supply Chain Management and Its Effect on Health Care Service Quality: Quantitative Evidence from Jordanian Private Hospitals. **Journal of Management and Strategy**, 4 (2), 42-51.

Assaf, M. A., (2015),**The Effect of Supply Chain Capabilities on Achieving Competitive Advantage (A Case Study of The Kawar Companies Group in Jordan**), (Unpublished Master Thesis), of degree requirements, College Business school, Middle East University, Jordan.

Athahabi, A., H., A., (2017), **The Impact of Total Quality Management on Electronic Supply Chain Management: A Field Study in Jordanian Pharmaceutical Factories**, (Unpublished Master Thesis), of degree requirements,College Business school, Middle East University, Amman, Jordan.

Buell, R., Campbell, D., and Frei, F. (2016). **How Do Customers Respond to Increased Service Quality Competition?**(Working paper) no. 11-084, Harvard Business School, Massachusetts, USA.

Deshpande, A. (2012). Supply Chain Management Dimensions, Supply Chain Performance and Organizational Performance: An Integrated Framework. **International Journal of Business and Management**, 7 (8), 2-19.

Eba, M. and Navjot, N. (2017). Role of Commodity Exchanges in Promoting Effective Supply Chain Management: Service Quality

Perspective, Case of Eacwse, Ethiopia. **International Journal of Research in Finance and Marketing**, 7 (2), 163-175.

El-Saghier, N. and Nathan, D. (2013). **Service Quality Dimensions and Customers' Satisfactions of Banks in Egypt**. In Proceedings of the 20th International Business Research Conference, 1-13.

El-Saghier, N. M. (2015). Managing Service Quality: Dimensions of service quality: a study in Egypt. **Managing Service Quality**, *9*, 56-63.

El-Shoghari, R., and Abdallah, K. (2016). The Impact of Supply Chain Management on Customer Service (A Case Study of Lebanon). **Management**, *6*(2), 46-54.

Frederico, G. (2016). Supply Chain Management Maturity: A Comprehensive Framework Proposal from Literature Review and Case Studies. **International Business Research,** *10*(1), 68.

Frederico, G. and de Souza, T. (2017). Alignment between Supply Chain Management Practices and Maturity: A Framework Proposal. **International Business Management**, 11 (3), 807-813.

Frederico, G. (2017)."Supply Chain Management Maturity: A Comprehensive Framework Proposal from Literature Review and Case Studies", **International Business Research** ISSN 1913-9004 (Print), ISSN 1913-9012 (Online).

Garg, A. (2014). Mechanic Clues vs. Humanic Clues: Students' Perception towards Service Quality of Fast Food Restaurants in Taylor's University Campus. **Procedia-Social andBehavioral Sciences**, 144, 164-175.

Gold, S., R.and Hahn, S. Seuring. (2013). Sustainable Supply Chain Management in Base of the Pyramid FoodProjects: A Path to Triple

Bottom Line Approaches for Multinationals? **International Business Review**22(5) 784–799.

Guo, R., Lee, H., andSwinney, R. (2013). **The Impact of Supply Chain Structure on Responsible Sourcing**. In Proceedings of Mand SOM Sustainable Operations SIG Conference, INSEAD, Fontainebleau, France (Vol. 28).

Islam, M. (2014). Analysis of Service Quality and Satisfaction Level of Customers in Banking Sector of Bangladesh. **British Journal of Marketing Studies**, 2 (7), 14-29.

Ismail, A. andYunan, Y. (2016). Service Quality as a Predictor of Customer Satisfaction and Customer Loyalty. **LogForum**, 12 (4), 269-283.

Ithiami, H. (2016). **Factors that Influence the Perceived Quality of Service Delivery of the Kengen Supply Chain**. (Unpublished Doctoral Dissertation), United States International University, Nairobi, Kenya.

Kanyurhi, E. B. (2013). Evaluation of customer satisfaction with services of a micro-finance institution: Empirical evidence from Women Association for Social and Economic Gain customers' in Togo, **African Journal of Marketing Management,** 5(2), 26-37.

Lietke, B. andBoslau, M. (2007). Exploring the Transaction Dimensions of Supply Chain Management. **International Journal of Networking and Virtual Organisations**, 4 (2), 163-179.

MAMO, N. (2015). **Service Quality Practices and Customer Satisfaction In Commercial Banks In Kenya**(Doctoral dissertation, SCHOOL OF BUSINESS, UNIVERSITY OF NAIROBI).

Miraz, M., Saleheen, F., and Rahman, M. (2016). **Supply Chain Management in Service Quality**. In Proceedings of the International

Conference on Industrial Engineering and Operations Management, Northern University of Malaysia, Kuala Lumpur, Malaysia, March 8-10.

Mohammad, H. I., Yakubu, K. M., Bawuro, F. A., and Magaji, B. Y. (2016). Service Quality and Rural Bank Customer Satisfaction In Adamawa State, Nigerian. **European Journal of Business and Social Sciences**, *5*(04), 01-11.

Nassiry, M., Ghorban, Z., andNasiri, A. (2012). Supply Chain Management and Service Quality in Malaysian Hotel Industry. **Supply Chain Management**, 4 (12), 119-125.

Netland, T. H., Alfnes, E., and Fauske, H. (2007, June). How mature is your supply Chain? -A supply Chain maturity assessment test. In Proceedings of the 14th**International EurOMA Conference Managing Operations in an Expanding Europe** (pp. 17-20).

Odhiambo, P. (2014). **Supply Chain Management Practices and Service Quality among Public Hospitals in Nairobi County, Kenya**. (Unpublished Master's Thesis), University of Nairobi, Nairobi, Kenya.

Omar, M., Ariffin, H., and Ahmad, R. (2016). Service Quality, Customers' Satisfaction and the Moderating Effects of Gender: A Study of Arabic Restaurants. **Procedia-Social andBehavioral Sciences**, 224, 384-392.

Omar, R. Ramayah, T., Lo, M., Sang, T., and Siron, R. (2010). Information sharing, information quality and usage of information technology (IT) tools in Malaysian organizations. **African Journal of Business Management**, 4(12), 486-499.

Ombwayo, I. O. K., and Atambo, W. N. (2017). Effects of Supply Chain Quality Management Practices on Performance of SACCOs in Nakuru

County, Kenya. **Imperial Journal of Interdisciplinary Research**, *3*(3).

Prakash, G. (2011). Service Quality in Supply Chain: Empirical Evidence from Indian Automotive Industry. **Supply Chain Management: An International Journal**, 16 (5), 362-378.

Quesada, H., Gazo, R., and Sanchez, S. (2012). **Critical Factors Affecting Supply Chain Management: A Case Study in the US Pallet Industry**. In Pathways to Supply Chain Excellence. Intech.

Raghavendra A.N. and Nijaguna G. (2015). Supply Chain in hospitality industry: Impact on Service Quality in Mcdonald's Restaurants, Bangalore. **Global journal of commerce and management perspective.**

Ross, A. (2011). Supply Chain management in an uncertain economic climate: a UK perspective, **Construction Innovation**, 11(1), pp. 5-13

Ross, D. (2016). **Introduction to e-Supply Chain Management: Engaging Technology to Build Market-Winning Business Partnerships**. Florida, USA: CRC Press.

Rostami, A., Khani, A., andSoltani, G. (2016). The Impact of e-Service Quality on the Improvement of the Level of Communication with Customers of Bank Melli Branches in South Tehran Affairs Office. **Procedia Economics and Finance**, 36, 448-455.

Saeedi,R. J., (2011), **Supply Chain Management and Its Impact on Health Care Quality among Private Hospitals**,(Unpublished Master Thesis), of degree requirements, College Business School, Amman Arab University, Jordan.

Saghier N.E. and Nathan, D. (2013). Service Quality Dimensions and Customers' Satisfaction of Banks in Egypt, Proceedings of 20th

International Business Research Conference, 4 -5 April, Dubai, UAE, Retrieved from www.wbiworldconpro.com on 24/10/2015.

Sakhuja, S., and Jain, V. (2012). Service supply Chain: An integrated conceptual framework. CIE42 **proceedings**, 216, 207

Santhiyavalli, G. (2011). Customer's perception of service quality of state bank of India: A factor analysis. **International Journal of Management and Business Studies**, 1(3), 78-84.

Sartori, J. andFrederico, G. (2012). **Supply Chain Management Maturity and Concept Dimensions: A Relationship Framework Proposal**. (Research Paper), Federal University of Paraná, Curitiba, Brazil.

Singhal, P., Agarwal, G., and Mittal, M. (2011). Supply Chain Risk Management: Review, Classification and Future Research Directions. **International Journal of Business Science and Applied Management**, 6 (3), 16-42.

Surowiec, A. (2013). Costing Methods for Supply Chain Management. **European Scientific Journal (ESJ)**, 9 (19), 213-219.

Taylor, E. (2014). **Differences in Supply Chain Designs for a Manufacturing Industry vs. a Service Industry**. Demand Media.

Urban, W. (2010). Customers' Experiences as a Factor Affecting Perceived Service Quality. **Economics and Management**, 15, 820-826.

Vencataya, L., Seebaluck, A. K., and Doorga, D. (2016). Assessing the Impact of Supply Chain Management on Competitive Advantage and Operational Performance: A Case of Four-Star Hotels of Mauritius**. International Review of Management and Marketing,***6*(4S).

Yahyazadeh, F. and Hashem Omrani, H. (2015). Evaluating Supply Chain Management and its Impact on Service Quality Management in Tourism Industry. **Indian Journal of Fundamental and Applied Life Sciences**, 5 (52), 2957-2966.

Yang, G. (2012). **Relationships between e-Commerce and Supply Chain Management**. In Kim, H. (Eds) Advances in Technology and Management (pp. 653-658). Berlin, Heidelberg: Springer.

Zhang, S. and Hou, Y. (2013). Measuring Service Quality of Supply Chain with SERVQUAL. **Information Technology Journal**, 12 (16), 3785-3787.

Appendix (1)

List of Esteemed Academics That Referee the Questionnaire

NO.	The Name	The University
1.	Prof. Ahmed Ali Saleh	Middle EastUniversity
2.	Prof. Heba Nasr El Din	Middle EastUniversity
3.	Dr. Sami al-Jabali	Middle EastUniversity
4.	Dr. Mohammed al-Adayla	Middle EastUniversity

Appendix (2)

Questionnaire

Thank you for accessing this questionnaire – before you proceed,please read the information below:

 The main objective of this thesis is to understand

The Impact of Supply Chain Activation on Service Quality in Jordanian Telecommunication Companies

(Zain, Umniah, and Orange)

 This thesis submitted to obtain a Degree of master's in business Administration.

 Your participation is voluntary, and you are implying consent toparticipate by completing and submitting this survey.

 This survey is anonymous, and no information that would identify you is being collected.

 Only aggregate data will be used in any presentations and publications that result from this research.

 The questionnaire should take around 15-20 minutes to complete.

 Accurately and objectively, answer on the questionnaire

paragraphs. We will be achieving results; which contribute to

develop the performance of your company in the future.

 Raw data kept confidential to the researcher.

Thank you for your time and cooperation.

Prepared by: **Supervisedby:**

April, 2018

Mohammad AlHamaideh Dr. Fayez Albadri

Demographic Data

Please indicate to the answer by placing the sign (x) in the opposite box to the left.

1- Gender

☐ Male ☐ Female

2- Age

☐ From 20 - less than 26 ☐ From 26 - less than 31

☐ From 31 – less than 36 ☐ From 36 - less than 41

☐ 41 - and More

3- Scientific qualification

☐ Diploma and less ☐ Bachelor

☐ Master ☐ Doctorate

4- Years of experience

☐ 5 years- and less ☐ from 6-less than 10

☐ From 11-less than ☐ From 15-19

☐ 20- and more

5- Job position

☐ Chief executive officer ☐ Vice President

☐ Division Manager ☐ Department Manage

☐ Employee ☐ AnotherPosition(……)

6- Name of Organization

☐ zain ☐ orange

☐ امنية

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
Independent Variable: 1. Supply Chain						
A group of actions that are created by an organisation to manage its functions effectively and efficiently, in lower costs and a faster production cycle, in line with customer demand, that can respond to changing levels of customer demand with minimal delay. **The supply Chain elements are:**						
1.1 Customer relationship.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
1.1.1	The organization solves customers complaints effectively.					
1.1.2	The organization develops long-term relationships with customers.					
1.1.3	The organization provides excellent services.					
1.1.4	The organization has channels to communicate the customers.					
1.1.5	The organization surveys the views of customers to identify their tastes and appetites to satisfy their needs.					
1.1.6	The organization has on good treatment with the customer.					
1.2 Technology and Tools.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
1.2.1	The organization has visually appealing buildings,					
1.2.2	The organization has visually appealing facilities,					
1.2.3	The organization has modern looking equipment (air conditioner, furniture, elevator, etc.).					

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
1.2.4	Employees of the organization appear neat and tidy (as uniforms and personal grooming).					
1.2.5	The organization has modern software programs (reservations, customers records, bills, Rankings, etc.).					
1.2.6	The organization provides modern technology in services according to customers' demands.					
1.3 Performance Measurement:		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
1.3.1	The organization has own Supply Chain system.					
1.3.2	The organization has the customer needs control by system.					
1.3.3	the organization has customer services tracking system,					
1.3.4	the organization has demand results indicators system,					
1.3.5	the organization has production results indicators system,					
1.3.6	The organization performs the right services at the first time.					
1.4 Supplier Intimacy.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
1.4.1	The organization expects the long-time relationship with key suppliers.					
1.4.2	The organization develops a partnership program with our key					

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
	suppliers.					
1.4.3	The organizationinvolves their suppliers in the organization strategic planning process.					
1.4.4	The organizationviews the suppliers as an integrated part of the supply Chain.					
1.4.5	The organization cooperates with key suppliers to improve the supply Chain quality.					
1.4.6	The organization exchanges information with key suppliers.					
1.5 Resources.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
1.5.1	The supply Chain has a strong focus on core competences.					
1.5.2	The supply Chain has a high utilization of machines and facilities.					
1.5.3	The supply Chain has a high utilization of transportation vehicles.					
1.5.4	The supply Chain has a high utilization of waste is minimized.					
1.5.5	The supply Chain can manage an unexpected large increase in demand.					
1.5.6	The supply Chainrenews constantly their sources.					

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
Dependent Variable: 2. Service Quality						
The ability of organization to assess of how well a delivered service conforms to the client's expectations, often assess the service quality provided to their customers to improve their service, to quickly identify problems, and to better assess client satisfaction in the appropriate place and time or offering appropriate services at the first request. **The service quality elements are:**						
2.1 Reliability.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
2.1.1	The organization promises to do something by a certain time, they do.					
2.1.2	The organization shows a sincere interest in solving the customer's problems.					
2.1.3	The organization provides the service right the first time.					
2.1.4	The organization provides the service at the time they promise to do so.					
2.1.5	The organization follows up consistently performance result.					
2.1.6	The organization insist on error free records.					
2.2 Responsiveness.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
2.2.1	The organization Employees tell customers when service will be performed.					
2.2.2	The organization Employees are always willing to help customers.					
2.2.3	The organization Employees give					

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
	prompt service to customers.					
2.2.4	The organization Employees are never too busy to respond to customers' request.					
2.2.5	The organization uses modern technology to respond to customers' request.					
2.2.6	The organization Employees are trainers for respond to customers' request.					
2.3 Empathy.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
2.3.1	The organization always give customers individual attention.					
2.3.2	The organization have operating hours convenient to all customers.					
2.3.3	The organization have customer best interest at heart.					
2.3.4	The organization takes into consideration customer conditions.					
2.3.5	The organization always share their interests with customers.					
2.3.6	The organization Employees understand the specific needs of our customers.					
2.4 Tangibles.		**Strongly agree**	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
2.4.1	The organization has modern technology,					
2.4.2	The physical facilities at our					

No.	Statements / The answerOptions Scale	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
		5	4	3	2	1
	organization are visually appealing,					
2.4.3	Employees at our organization are neat in appearance,					
2.4.4	Materials associated with the service at our organization are visually appealing,					
2.4.5	The organization gives the gifts for customers,					
2.4.6	The organization gives the freebies service for customers.					