

# Implementation of the supply chain management strategy and its impact on organizational performance: An analytical study of public service organizations in Iraq - Ministry of Health is modelled

Dr Muna Haider Abdul Jabbar Altaai

Assistant professor College of education for women, University of Baghdad, Iraq

**Abstract:** - *The strategy of Supply Chain Management (SCM) has received increasing attention from researchers and scholars in the areas of service management and processing in organizations in general, especially general, and although most studies have focused on the content of their applications in private organizations, their role is no less important in public organizations. As a gateway to efficiency and effectiveness in the dynamics of these organizations, practices have emerged that have become defining standards for their operations by which the efficiency of organizational performance and quality of services are determined, hence the need to study this strategy and identify key applications to be adhered to by the departments of public service organizations. The process of deepening a strategic study ((SCM) and its applications are of varying dimensions and complexity as a result of its significant impact on the organizational performance of various organizations' activities and processes (BovAird & Loffler, 2016:45). The problem of the weakness and inefficiency of supply chain management in public service organizations is one of the main problems experienced by most service organizations in developing countries, especially Iraq after the political, economic and social transformations and changes that it is exposed to, and despite the developments in the areas of public supply systems in the advanced countries and some of the developing countries, our public organizations are still managed according to the traditional methods that lack the most basic requirements for effective supply. This study aims to shed light on the reality of (SCM) strategy applications in public service organizations and to identify the extent to which public organizations departments understand the importance of adhering to them and their impact on the quality of organizational performance from the point of view of the study sample that was deliberately, intentionally and included (100) people working in contract and supply departments at the Ministry of Health, one of the most important results reached was the limited awareness of the importance and seriousness of the role that the supply chain strategy plays in enhancing the capacity and organizational performance of the general organization from the point of view of the sample members, the most important recommendations are to emphasize the importance of developing specific decrees and laws for the work of public supply chains with the concepts of controlling the country's public financial management, to restrict contraventions and surpluses that occur in the operations of healthcare supply chain organizations.*

**Keyword:** - *Public Service Organization - Supply Chain Management (SCM) - Supply Chain Strategy (SCS) - Organizational Performance - General Supply Chain Metrics.*

## 1- Introduction

Under the new world order, the strategy of the supply chain has become a major asset of the organization which seeking success and excellence. Noting that most organizations, especially the general ones, do not think about the chain of support supply, except when a malfunction or problem occurs, such as fluctuations in demand and distribution levels,

Client dissatisfaction with services, emerging problems with the suppliers, or the reference comparison analysis shows a lower performance of the supply chain, while high-performance organizations harness their supply chains to improve their organizational performance. Thus, gaining a competitive advantage. So it always strives to search for the latest ways and methods to add value to the goods and services it provides (Cohen & ROUSSE,

2013: 1). Today, all organizations need a strategy to manage their supply chain, and it is consistent with their substantial business strategy.

SCM's work today has become another challenge for public organizations working in the public service sector such as (hospitals, educational institutions, social welfare institutions ... etc) due to the transmission of the chain from the traditional concept that focuses on managing the financial and material flows through the links of the chain to managing a range of integrated processes and dynamic relationships that seek to create and provide social value to the ultimate beneficiary (consumer), which requires departments to strive to achieve compatibility between operational and suppliers' processes, equipped to correspond the flow of materials, information and services in line with the requests of the beneficiaries.

As a result of the importance and vitality of this topic at the present time, especially that this topic has not been previously studied in the past within the framework of the service sector environment in Iraq, exclusively according to the researcher's knowledge and viewing the speculations, as most studies focused on the applications of the SCM strategy focused on its practical implications within the private sector's surroundings on the one hand. In addition to its role in enhancing the status and effectiveness of public service organizations on the other hand, especially under the conditions of the variation that taking place in the country, the researcher considered to address it in an in-depth research in an attempt to identify its applications in public organizations and the impact of those applications on the overall organizational performance, and for that reason, the search was divided into four studies.

## **2- Research Methodology**

### **2 – 1 Research Problem**

The supply chain management is today one of the major departments of any organization, especially the general ones, as any application disruption has an impact on the overall organizational performance of the organization in the short term, and thus on their long-term success. The problem of the weakness and

inefficiency of supply chain management in public service organizations is one of the main problems which the majority of service organizations in Iraq suffer. In particular, following the political, economic and social changes and variations in the Iraqi environment, and despite developments in the areas of public supply management in advanced countries and some developing countries, our public organizations continue to be managed according to traditional methods that lack the most basic requirements for effective supplying. The research problem is reflected in the limited attention paid by the departments of public service organizations to the importance and impact of (SCM) strategic applications on organizational performance. The following questions may, therefore, be raised:

1- This topic has not been previously studied in the framework of the service sector environment in Iraq exclusively according to the researcher's knowledge and speculation presentation, as most studies focused on strategic applications (SCM) have been applied exclusively within the private sector.

2- To present and configure contemporary vision and perceptions of the (SCM) strategy applications in public service organizations and to determine the nature of their impact on organizational performance.

3- Keep up-to-date on the implementation in the field of the (SCM) strategy applications in public service organizations, while identifying the fundamental ideas.

4- The importance of the research is that it involved within the condition of public administration in general, especially the management of service organizations that are primarily responsible for meeting the needs of the members of the community, thus increasing the satisfaction of the beneficiaries, which is subsequently reflected in the positive relationship and trustworthiness between the citizens and the government.

### **2 – 3 Research Objectives**

Based on the problem and importance of research, its objectives can be determined as follows:

1- To highlight the reality of strategic applications (SCM) in public service organizations and to identify

the extent to which the management of these organizations realizes the importance of adhering to their applications due to their impact on organizational performance.

2- View and analyze the most important applications to be observed to improve the quality and efficiency of organizational performance and reflect on the success of public organizations in meeting the needs of beneficiaries.

3- To draw the attention of the departments of public organizations to the recognition of the importance of developing an integrated (SCM) strategy with, and part of, the main business strategy of the organization.

## **2 - 4 Hypothesis of Research**

The search includes the following assumptions:

1- First major hypothesis: there is a significant relevance between the applications of the supply chain management strategy and organizational performance in the public service organization.

2- Second major hypothesis: there is a significant impact of the applications of supply chain management strategy on the organizational performance of the public service organization.

## **3- Conceptual Framework:**

### **3 - 1 Supply Chain Management Concept**

García DM Lambert, SJ: (2005,21) refers to the Supply Chain Management (SCM) as "the integration group of activities and processes from raw materials primary supplier to the transformative processes involving all public organization units to the end-user of the service".

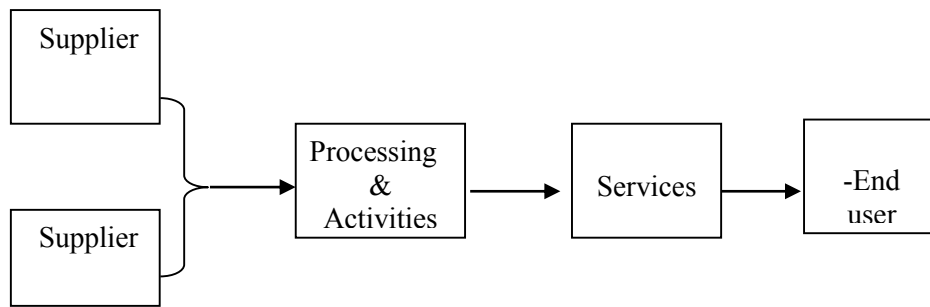
(Scharj, 1998:157) also indicates that (SCM) is a broad concept of "a system that encompasses all the internal operations associated with the organization, as well as associated with relevant external organizations, from the procurement process to raw materials through transformation processes to the final product/service". While (F.R Jacobs et al, 2004:445) indicated that "the internal communication management of organizations that

will be linked to each other with links from the top and bottom of the chain within various operations that provide value in the form of products and services for the final customer". (M.Daves, 2003:517) described the supply chain as an "integrated approach to the production, design and delivery of products and services to the customers and includes all the processes through which the organization provides value to customers".

While, (2005:56 L. J. Krajewski, L.P Ritzman) suppose that Supply Chain Management is "customer relationship correction processes, execution of the demand, supplier relationship processes, and synchronization of these processes with the core processes of the organization's suppliers and customers in order to adapt the flow of materials, services, and information with the customer's demand". The comprehensive supply chain is a "comprehensive progressive concept that includes all strategic applications (SCM) with the aim of maximizing efficiency in operational processes at all levels of the organization.

The difference in researchers' perceptions of the concept of managing the chain is only formal because it contained fundamental and fundamental assertions that the management of the supply chain must become a major part of the organization's structure so that the latter can meet the requirements and needs of the external environment and be able to respond quickly to the final customer's requests. Managing the chain today is thus the management of a network of relationships between partners in the chain to integrate their needs and the needs of the organization.

Finally, it can be said that the management of the public-processing chain is "a single entity in which individuals and working units participate in order to achieve the overall objective of maximizing the social value of the end-user of his service consumption."



**Figure (1): Supply chain model in a service organization**

Source: J.Stevenson, William;2007, Operations Management, McGraw,504

### **3-2 The importance of supply chain management in the service Industry**

#### **2-3-2 the goals of Supply Chain Management**

The goal of providing an affordable and convenient product service is no longer enough today because today's series goals are becoming more extensive because the appropriate service/product delivery in quantity, time, place, and lowest cost requires efficient coordination between the chain loops that are increasing to become the chain a network of independent organizations that aim to take joint action. Any deterioration in the performance of any of them leads the customer to deal with other supply chains, this leads to a deterioration in the chain's revenue ratios, and these loops need to be managed in a way that operates the integrated chain vertically in terms of planning and coordination. One of the most important strategic objectives (SCM) is efficient planning and coordination of the activities of the chain in a way that achieves the highest level of service for the customer and at the lowest cost.

(Dilworth) embodied the objectives of supply chain management with two main goals that lead to its development:

The first goal - coordination between the links of the chain for the purpose of working together to develop better relationships within the chain between suppliers and customers to ensure a rapid and consistent flow of services and products.

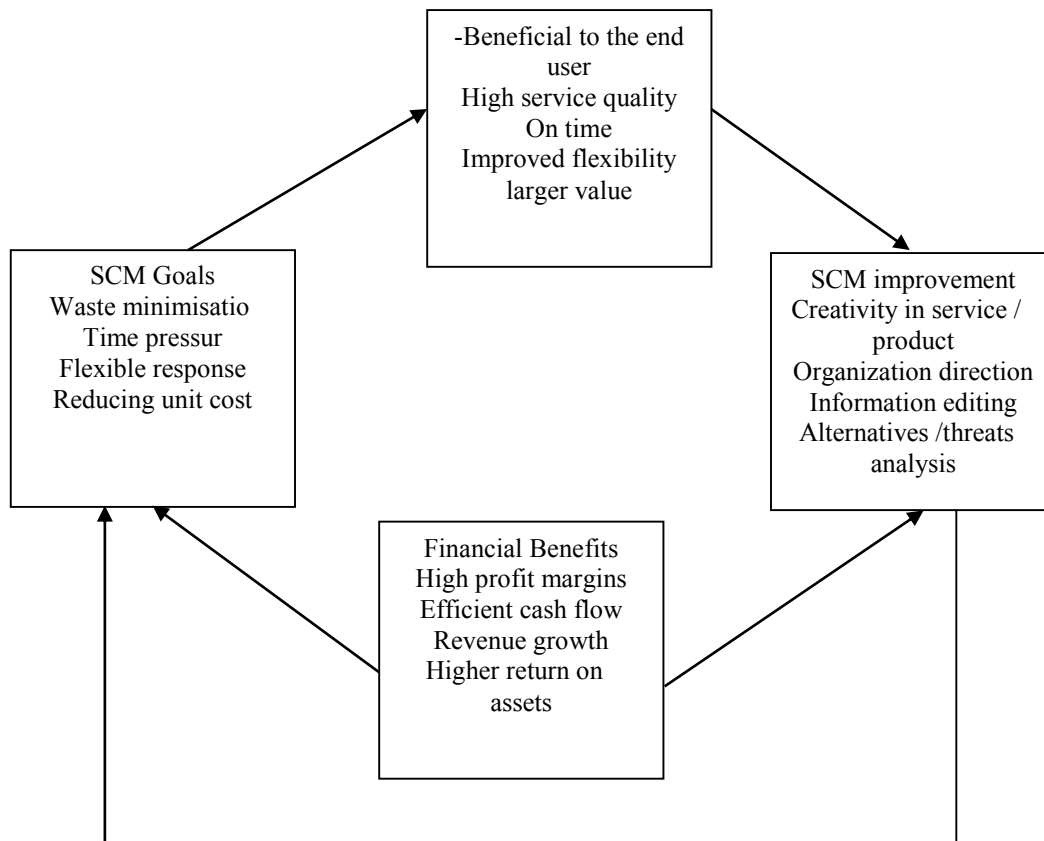
The second goal - focus on applications and activities that add faster value within the chain.

(F.R Jacobs's et.al; 2004; 446) identify the goals of the chain as follows:

- Satisfying the end-user by responding adequately to them, understanding the market through information technology that facilitates the collection of information on demand from point of sale to point of use, and making each loop integrated with other loops through the participation of everyone in focusing on the end-user.

- Focusing on the efficiency of the chain in terms of management and processing by reducing inventory and keeping it only when needed, which means adopting the concept of the shorten chain.

- Focusing on the flexibility of the chain by adopting the concept of a flexible chain that can adapt to situations of uncertainty and fluctuation, the goal in public organizations can be translated into precise areas such as flexibility, delivery reliability, accuracy and on-time delivery measured, ease of access and quality. These goals, despite the multiplicity and diversity, they provide the great main goal in managing the chain, which is to provide and achieve benefit for each customer (adequately meeting their needs) and achieve the benefit to the organization by focusing on reducing costs and improving profitability margins. As shown in Figure (2)



**Figure (2): The goals of supply chain management and the relationship between them**

Source : PC Brewer &, Thomas W Speh. ; (2000), Using the Balanced Scorecard To measure supply chain performance, Journal Business Logistics; 21; 78.

### 3-3 Reasons for developing the SCM strategy in public organizations

Today, public organizations have begun to face many pressures to reduce cost, with increasing calls to maintain high-quality standards of services provided and to achieve these goals, these organizations faced many of challenges known as changes in labour market economies.

The rapid technological developments that have established new markets and processing methods have forced organizations to reconsider their work structures in order to enable them to expand their relations with external parties.

Today's survival is stronger in terms of the ability to adapt and respond to the demands of global shifts in labour economies. In the past, organizations have been undertaking a few work and activities to manage their processing chains, since they tend to focus on their current operations and suppliers, but many environmental changes have made them work to review the applications of their general supply

chains. (Handfield et al., 2009) identified the reasons for developing the general supply strategy to (Rahma et al., 2020):

- 1- Increased user demands high-quality public services and products with low cost, rapid response, delivery efficiency, accuracy and on-time delivery and ease of access.
2. The developments taking place in the methods of managing public organizations. After the economic crisis of the welfare state model with the beginning of the 1990s, the public service sector was forced to practice techniques and methods of work that were successful and developed, since the emergence of models such as the new public management (NPM) and the restructuring of government organizations (REGO) and governance (Governance) imposed on the administrations of public organizations adopt a model of processing techniques similar to this one that applied in the private sector:



3. The emergence of new principles for managing public service organizations, as follows:
4. Emphasis on overall results and performance of the organization.
  - Flexibility perspective and high adaptation working.
  - Emphasis on decentralization of authority and involvement of relevant parties (suppliers) in the formulation of public business policies and strategies.
  - Enable units and personnel and give them more work authority.
  - Move toward working according to the market and private sector model.
  - Confirm that the beneficiary needs are met.
  - Growing demand for internal and external partnerships and contracts with the suppliers to achieve a better quality of public service.
  - Follow-up on upgrowth developments from the information and communications technology which made a revolution and changes implemented the processing and delivery of public services.

### **3- 4 Necessary applications for the success of the common SCM strategy**

Managing the process chain in public organizations should understand the applications that lead to the success of all their activities and operational operations in the chain, in order to ensure that the verification of public goals are met, the applications of SCM are the "set of activities within the organization's perimeter to improve the effectiveness of management processing chain group" includes all of the following: (Flynn et al.,2010:3)

- 1- Integrated relations between the organization and the client.
- 2- Integrated relationships between the organization and the supplier.
- 3-Integration between internal and external units.
- 4- Sharing and gathering the information between all levels and parties of the processing chain.
- 5- Cooperation between parties in the formulation and implementation of the Strategy.
- 6- Forging sustainable partnerships and alliances between the parties involved in the chain.

7- Build trust-based and transparent relationships with staff in the processing chain.

According to (23: 2006 M. Essig, & S. Dorobek), the strategy of integration in the management of the public sector processing chain has a key role to play in providing optimal supply support, all governments today are trying to enhance the efficiency of their public sectors, and citizens want to see efficient financial management and the way to achieve this is through the government should support endeavour programs to improve the efficiency of processing their public sector services. To achieve this, public supply chain management must be committed to particular applications. (SC Lenny Koh et al., 2007: 106) identified SCM applications as follows:

Strategic planning for the supply chain / technology and information management / continuous flow of operations / partnership with suppliers / management department / customer relationship management / provider relationship management / service delivery management.

The overall SCM success is measured in the framework of the success of these applications in achieving the following indicators:

- Reduce the cost and achieve the value for the customer.
  - Use technological innovation to develop and adjust new delivery methods.
  - Improving profitability and productivity.
  - Reducing risk.
  - Improving regulatory competitiveness.
  - Build and design processing overview that allows for operational and strategic adaptation to rapid environmental changes.
- (2008: 4 SO Migiros, IM Ambe) indicated that effective supply chain management applications should achieve the following:
- 1- Offering unique services and products.
  - 2- Achieve advanced quality.
  - 3- Reduce the costs to gain a competitive advantage.
  - 4- Achieving short demand cycles.
  - 5- A higher response to customer requests.
  - 6- Better management of the Organization's assets.
  - 7- Strengthening internal and external cooperative relations.

8- Promotion and acceleration of the research and development programs.

Organizations that are part of successful global processing chains exhibit a set of distinct characteristics when compared to traditional organizations:

- Building sophisticated relationships, resulting in better services for their customers.
- Provide goods and services according to customer's requirements and expectations.
- Ensuring quality and safety as the first priority in their applications.
- Efficient response to sudden changes in market needs.
- Earn revenues that contribute to the success of the entire members of the processing chain.
- To lead the organization in its work.

**3.5 characteristics of process chains in the public sector**

The general measure/processing is "significant work in government activities and services" under which billions of funds are spent on goods and services annually to support the activities of the organizational and regulatory units of the State". Forms of public sector management take the country's highest national expenditure ratio and its operations and stages are controlled by legislation and administrative, the Department of Public Administration here focuses on the procurement and export of goods and services within the value processing chain. For his part, ((76: 2011), IM Ambe, JA Badenhorst-Weiss) emphasized that effective general supply chain management must have a number of characteristics:

**Table (2) the characteristics of public sector supply chains**

Characteristic definition	Characteristic Description
Network	Includes all organizational relationships and networking (vertical and horizontal)
Target	The primary target is to achieve efficiency and effectiveness in public administration
Flow	Insurance of complex flows of information, services and finance.
Administration	It is administered by the Government and guided by legislation, laws and regulations

1- Better allocation of risk/is a key element of the measure, risk must be allocated by the best ways to manage it with a better understanding of how the public service is processed.

2- Greater clarity/ clarity creates sub-contracting opportunities for diverse areas of organizations that can bring increased competitiveness, individual and dynamic skills while enhancing the potential of the government sector. This can increase the competitiveness of the service sector and allow public organizations to have distinct skills and powers that enable them to enter the local and globally competitive market environment.

3- The greatest opportunity for creativity/creativity of supplier in the processing chain can contribute to the best quality, fastest delivery, and cost-effective management of the process chain must demonstrate an inherent capability of innovation that runs through all the chain paths.

4- Better identification of requirements/the current processing chain involves the acquisition of a better determination of service requirements through monitoring and depth of market.

5- The best quality investigation/offers by the organization to the suppliers can be as easy as defined opportunities in their processing chains, so you can achieve the best quality and improved delivery time with the lowest cost.

6- Advanced ability to identify the risks and problems that represent bottlenecks in the chain paths (bottleneck), creating obstacles in the chain paths and table (2) illustrates the characteristics of the public service sector processing chains.

(S. Cohen & Roussel J., 2013:23), there is a set of features that the processing chain must-have in any public organization:

Integration/ to be able to meet the demands of the changing market environment.

– The interconnection of the segments and stages of the chain so that they can successfully deliver the service.

– Flexibility/allow to manage and address risks.

-Responsibility/is capable of promoting environmental and social well-being.

– Adapt/respond quickly to growing demands and needs in the business environment.

### **3 – 6 Regulatory performance and the performance of the measure of SC Performance series**

1- General organizational performance: the overall organizational performance is defined as "the ability of the organization to achieve its objectives and accomplish its mission through the right management, stable governance and appropriate internal and external flows", or the ability of the service organization to achieve its overall objectives in the light of the commitment to the specific strategic direction and adaptation, and the focus on customer service. Leadership in achieving sustainability with a focus on results. The public service sector is under pressure from both internal and external sources to demonstrate improvements in its performance, and local-municipal entities and other government units pay great attention to the performance standards of the processing chain and record improved performance and increased accountability (Ma Barry, 2000:21). Organizational performance can be studied from a process chain performance perspective in which case it should include (increase Sales volume - coordination between all organization units - integration of elements and components (SC) and PJ Singh, AJR Smith, 2004: 396) that the dimensions of organizational performance may include the following dimensions ( Innovation- level of Performance R&D). The public sector today needs to review both: the way it plays, the way budgets are prepared, and the implementation and management

of programs. Ways to deliver services to enhance the ability to meet the needs of the relevant government organizations and to meet the needs of citizens, on the other hand, thereby improving overall organizational performance and achieving accountability GA Boyne, 2003:214) (MH Al-Taai, 2019:2). In our research, the focus will be on measuring organizational performance through the performance of the process chain by adopting a balanced scorecard that has already been adopted in many studies to measure organizational performance in the field of public service organizations.

2- Measuring GPM performance: there is a growing awareness that using performance metrics to estimate (and measure) performance is central to any organization; public, private or non-profitable ((2005: 22) P.R. Niven), yet measuring performance remains a challenge for managers and researchers in the public field ((2003:17) ET A.C Maltz). In the process of designing and implementing an effective management system, a number of methodological issues need to be identified and the process of change managed ( TH Poister, 2003:8), although public organizations have practical and timely systems of performance management, many of these systems and standards used fail to do their work properly.

Measuring the performance of the process chain is the first step toward improvement (B. Schroder, R., 2007, 197) to, as the basic performance and set of objectives must be determined for improvement. Performance measurement is defined as the assessment and comparison of information relevant to the results of processes, services and products with objectives, patterns and previous results, and other processes and products. The studies differed in the issue of how they dealt with the type of performance measure according to the researchers' views, some of them focused on traditional financial measures such as return on investment, liquidity rate etc. (T van der Vaart, DP van Donk,2008:43) that the performance measurement of the general process chain should include:

- Operational cost indicator
- Customer service indicator
- Financial performance indicator



Recent trends in the use of performance measurement systems began in the late 1980s as a result of changes that focused on non-financial metrics such as time, quality, flexibility and overall supply chain performance measures include the measurement of each of the following: B. Schroder, R., 2007,197)

- Delivery
- Quality
- Time
- Flexibility
- Cost

The organizational performance of the Organization's overall processing chain includes three classifications through which it is measured:

1- Performance Resource PR / reflects the added value of resource utilization.

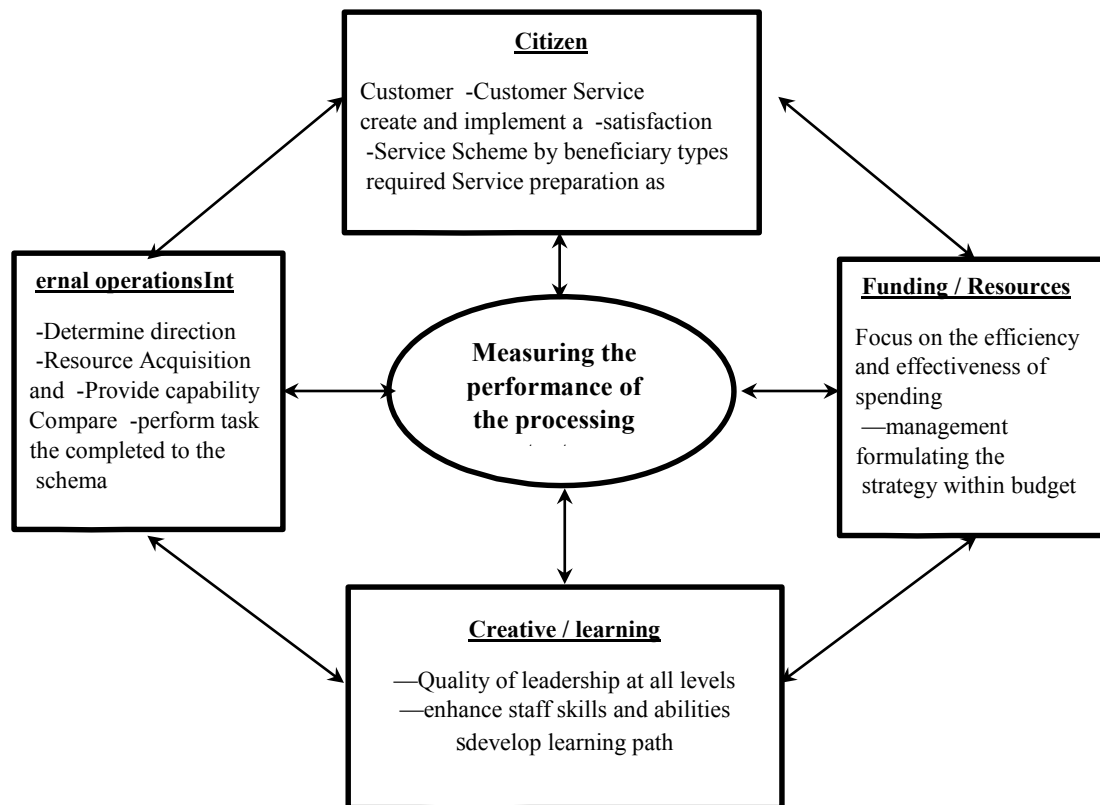
2- Output Performance OP / reflects the added value that reflects the organization's ability to provide services to its beneficiaries with the highest degree of satisfaction and best quality.

3- Flexibility Performance FP / reflects the value-added that expresses the organization's ability to quickly respond to the renewed customer's requests and needs (Handfield et al , 2009) finds that there are different types of performance measurement systems that can be applied in measuring the performance of service-sector processing chains, reference comparison i.e. comparing the performance of the organization's processing chain with that of other organizations operating in the same field, it has been widely used as a tool to improve the operational process and to improve organizational performance, and to enhance the competitiveness of public service and manufacturing institutions in the world as well as the balanced scoring card, which is the most common performance measurement system by public organizations. Developed by Kaplan & Niven as a way to measure and coordinate organizational performance with the organization's strategic goals and plans (JD Wisner et al., 2014:52). The multi-

dimensional, balanced scorecard is seen as one of the main ways in the strategic performance measurement system within public organizations (C UMASHEV, R Willett - Abacus, 2008:381), the measurement of performance in the service sector traditionally focused on financial metrics such as revenue (gross income) and cash flows, while financial and accounting indicator measures can be provided directly in most public organizations and can actually reflect the situation, but cannot determine the underlying parameters for both satisfactory performance and unsatisfactory performance, as the focus here is on measuring program delivery efficiency and making the best use of resources. Unlike the private sector where financial measures such as return on assets (profitability), then return to the equality for the stakeholder is the basis (Haddawee & Flayyih, 2020).

### **3 – 7 the measure of a balanced scorecard in the service sector**

The task of setting standards to define goals, objectives, and collect information related to non-financial standards is not an easy process in service sector organizations, so a balanced scorecard has become a guiding tool within the context of the public service industry such as health and educational services, as well as the services of local and municipal government organizations and non-profit (voluntary) organizations. (Yasherj Askim, 2004) refer to the extent that governmental organizations can achieve to become effective learning organizations as part of the adoption of a performance management reform system using a performance measurement model that can be applied in the government sector such as a balanced scoring card (BSC), balanced scorecard components in the service sector processing chain include both the citizen as a customer, finance internal processes, creativity and learning resources. Figure (3) shows the components of a balanced scorecard in a service sector processing chain based on its procrastination (IM Ambe et al., 2011:82)



**Figure (3) balanced scorecard components in the service sector processing chain**

**4- Previous considerations:**

IM Ambe, JA Badenhorst-Weiss study (2011) aimed to demonstrate the role of the overall supply chain management strategy in enhancing organizational performance which made significant changes in the way the public service organization itself presents. New performance values have emerged through an integrated and consistent processing chain to satisfy customers in an effective and profitable style. As a result, many of the studies applied in various sectors and industries have emerged, and many of these studies have noted that the strategy of the effective public processing chain is a powerful tool for achieving competitive advantage and results of more efficient regulatory performance for all parties within and outside the organization (Flayyih et al., 2019). The researchers used the case study method of the departments of public sector organizations' supply chains in South Africa by presenting the reforms that took place in the general governance systems that started since 1995, which focused on the first two areas: first, promoting good governance principles and the second, by offering the best system for determining economic and social goals (khdier Abass,2020).

The study found that applications and metrics are increasingly important in improving public sector processing chains since SCM allows public organizations to reduce cost, improve quality, reduce waste time and improve organizational effectiveness, the results of the study showed significant differences in the applications of process chains between public and private sectors, as they are public sector processing chains. A tool to enhance the quality of service that is intended for beneficiaries, while SCM in the private sector as a means of enhancing profitability and reducing cost. The study also indicated the need for public sector processing managers to measure their performance in order to assess the degree to which the performance is commensurate with the expectation. A balanced scorecard is one of these key measures in improving the performance of public sector organizations' processing chains. LL Yap, CL Tan (2012) study aimed to present a conceptual structure to clarify the relationship between service supply chain management applications and organizational performance in health care in the presence of the median effect of the Integrated Alliance Network in Malaysia, the researchers used the descriptive

analytical approach, the research sample included a proposed study structure applied in the health care services industry in the health organizations in Malaysia. To achieve this, a questionnaire was designed that includes the independent variable, which includes five main dimensions for SCM supply chain applications, and it is considered the most appropriate in the health services industry, namely: information technology management - demand management - management relationship customer-supplier relationship management - resource management and identified to have a positive relationship with organizational performance directly with of intermediary alliances factor.

The researchers concluded a series of conclusions, the most important of which was that the health care service supply chain represents today one of the main components in the public service industry in Malaysia because of the increasing demand for medical treatment services. This highlights the need for the departments of health service organizations to seek the best methods and measures to improve their organizational performance in order to deliver a high-quality service.

**5- View and analyze the results of the field study**

**5- 1 social and the study samp**

The Reliability of Study Instrument research tool test was based primarily on the resolution to collect the necessary initial data and its questions were constructed (drafted) on the basis of various theoretical studies and writings and in accordance

**Table (1) characteristics of the research sample**

Category	Repetition	Ratio
<b>Gender</b>		
Male	34	80.95%
Female	8	19.05%
Total	42	100.00%
<b>Experience</b>		
Less than 10 years	17	40.48%
Only 11 years to less than 14 years	4	9.52%
Only 15 years to less than 19 years	8	19.05%
Only 20 years to less than 24 years	2	4.76%
Only 25 years and over	11	26.19%
More than 25 years old		0.00%
Total	42	100.00%

with the 5 points Likert scale. The form consisted of two points, the first dealt with the applications of the processing chain in the public organizations as defined by (, 2014 Mwale); (Kuh et al., 2007); the second was for the organizational performance indicators of the public service organization whose questions were developed on the basis of the balanced scoring card scale as presented by (2011 Ambe & Badenhorst). Accordingly, (75) resolutions were distributed to the sample of the search, of which (50) were recovered and (8) neglected because of incomplete answers, and the sample of the search (42) individuals became the internal consistency and resolution of validity were validated using coefficient consistency and the stability of the resolution through the use of a parameter Alpha Cropach. The survey form, which showed that the stability factor of the resolution is high, at 0.84, indicates that the resolution in all its aspects is highly stable and therefore can be adopted for analysis and results approval that the reliability is equal to the root of the stability factor. The resolution was 0.91 and is a high value for the measurement.

The research community, working in the Department of Medical Contracts and Processing in the Ministry of Health, has been deliberately selected, with 42 respondents from the Ministry. This research seeks to identify a relationship between both strategic and organizational performance applications in the public service organization that have developed the characteristics of the search sample.

<b>Qualification</b>		
Diploma	5	11.90%
Bachelor	24	57.14%
M.A.	3	7.14%
PhD.	5	11.90%
Total	42	100.00%

**5 - 2 Display and analysis of descriptive results and explain the variables:**

The results of the field study conducted by the researcher have been analyzed, using the meta-statisticians of the arithmetic mean, standard deviation through the 5 (Likert) scale (fully agree=5, agree=4, neutral=3, disagree=2, fully disagree=1), and the researcher has determined the level of answers in the light of the computational circles by determining their belonging to any category. On this basis, the central hypothesis was calculated, the factoring analysis methods were used to measure the effect of the independent variable on the dependent variable, the arithmetic mean (weighted mean) of the scale is determined from the length of the period first, which is equal to the quotient of 4 by 5. 4 represents the number of distances from 1 to 2 first, and 2 to 3 second, 3 to 4 is the third space, 4 to 5 is the fourth space, and 5 is the number of choices. When 4 is divided by 5 the length of the class is produced and the distribution is equal to 0.8 and the distribution

according to the paragraphs of the scale of the weighted mean is not agreed at all, 1.8 to 2.59 disagree, 2.6 to 3.39 neutral, 3.4 to 4.19 agree, and 4.2 to 5 completely agree. A questionnaire form of 50 questionnaire forms, which included two variants, was distributed, with the first variable in the processing chain covering six dimensions: strategic partnership with the provider, customer relationship management, information sharing, information quality, flexibility, improvement, and the processing chain for the processing chain. While the second variable, known as organizational performance, contains four dimensions: citizen perspective, financial/resource perspective, internal processes, learning and training perspective, and table (2) shows the presentation and analysis of the descriptive results of variables by showing the mathematical milieu and the overall standard variations of the variable, process chain and organizational performance.

**Table (2): Arithmetic circles, total standard deviations, difference coefficient, and relative importance**

<b>Variable</b>		<b>Processing chain</b>	<b>Organizational performance</b>
N	Valid	42	
	Missing	0	
Mean		3.83	3.61
Std. Deviation		0.62	0.76
Coefficient of variation C.V		0.16	0.21
The relative importance of the variable		84%	79%
Outcome (compared to the weighted mean)		Agree	Agree

Table (2) shows the computational media and standard resolution deviations distributed to sample members, and through the table above shows that the

total mean of the calculated variables for the process chain and organizational performance that were higher than the hypothetical mean of 3, out of 5, and

in high consistency of answers through the standard deviation value. This result shows that there is agreement on the role of the process chain in organizational performance, while the result of the variance coefficient indicates a decrease in the dispersion of sample members while the importance of the independent variable is higher than the dependent variable.

**5- 3 View and analyze the results of the evidentiary study and test the search hypotheses:**

The first step in determining the relationship between variables is to identify the underlying research variables and dimensions and the nature of the relationship between them since we have only two variables, which is a variable that is determined by the person who studied and is considered an independent variable, and the independent variable is accompanied by another variable called an approved variable, which is independent and based on these variables, the research includes the following hypotheses:

H1: There is a significant correlation between the applications of the process chain management strategy and organizational performance in the general service organization.

H2: There is a moral impact of the process chain management strategy applications on the organizational performance of the general service organization.

**Test and analyze the correlation between search variables:**

In this paragraph, the research hypotheses relating to the correlation between research variables formulated based on the research problem were validated, and statistical methods for the correlation coefficient (Pearson) were used to determine the type of relationships between the lookup variables and the table (3) shows the results of the Pearson correlation coefficient values for the assumed lookup variables. Table (3) the results of the Pearson correlation coefficient values for the lookup variables.

Variables		Processing Chain	Balanced Scorecard y
processing chain X	Pearson Correlation	1	0.464**
	Sig. (2-tailed)		0.002
	N	42	42
Balanced Scorecard y	Pearson Correlation	0.464**	1
	Sig. (2-tailed)	0.002	
	N	42	42

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

The results of the table (5) indicate that there is a positive association relationship with a significant relationship of 0.002 that is less than a significant level of 0.01 and the correlation coefficient of the variables is 0.464, a positive value that indicates that there is a positive association relationship with a significant relationship at 1%, and the first search hypothesis is accepted.

4-5 Analysis and news of the regression relationship between research variables: The influence relationship has been investigated according to the

multiple regression equation, and the relationship between variables is observed to be reciprocal as they affect each other because organizational performance is influenced by the method (process chain).

Table (4) Results of regression equation values obtained from the survey results from the investigator.

Table (4) regression factor values between organizational performance and variable dimensions organizational performance



Dependent variable	Dimensions	Statistical indicators			
		$\beta$	P value	$^2R$	F
Processing Chain	Strategic Partnership with Supplier	0.249	0.001	0.45	4.88
	Customer Relationship Management	-0.063			
	Share Information	0.405			
	Efficiency of Available Resources	-0.295			
	Quality of Information	0.508			
	Flexibility and Improvement	0.100			

Through table (4), the value (F) calculated for the model was 4.88, which is greater than the value (F) of 4.19 at the level of an indication of 0.05, and therefore we accept the hypothesis, which means that there is a statistically significant impact of the processing chain on organizational performance at a 5% level of confidence of 95%. The value of the coefficient ( $s^2$ ) was 0.45, which means that the dimensions of the process chain explain 45% of the changes in organizational performance, and the remaining 55% is due to the contribution of other variables not involved in the regression model that was not addressed by the researcher. P-value, which was 0.001, refers to the significance of the regression model parameter, being less than the level of morale (0.05). The scale factor of the slope angle of the slope ( $\beta$ ) is as follows:

- 1- Any increase in the level of the variable strategic partnership with the one-unit will increase the level of organizational performance by (24%).
- 2- Any increase in the level of variable managing customer relationships in one unit will adversely increase the level of organizational performance by (6%).
- 3- Any increase in the level of the variable shares information and level Information quality in one unit will increase regulatory performance by (20%).
- 4- Any increase in the level of variable the efficiency of resources available in one unit will adversely

increase the level of organizational performance (29%).

5- Any increase in the level of a variable in the level of information quality in one unit will increase the level of organizational performance by (50%).

6- Any increase in the level of variable flexibility and optimization in one unit will increase the level of organizational performance by (10%).

## 6- Conclusions and Recommendations

### 6.1: Conclusions

1- As an important issue affecting the success and superiority of the organization, the authors and researchers have increased their interest in the issue of the processing chain through its close link with the management of operations, as the type and efficiency of the processing chain affects the organization's ability to manufacture and meet the needs of clients and contributes to its strategic objectives toward enhancing its core competitiveness with sustainability and market success.

2- Although there are several SCM studies conducted by various researchers (Goldstein-Harrison-Harmon-Peters-...Exc), none of them has given attention or emphasis to the operation of the generic process chains and the methods used to measure their performance, a knowledge gap has emerged between the public scrutiny and management specialists.

3- Public scrutiny is based on both legislation, politics, and process, serving a wide range of

stakeholders and placing a great emphasis on accountability and transparency with little or no flexibility. Accordingly, there is a difference in the application of the process chain management in both the public and private sectors, which is the result of different objectives of both sectors, whereas the main objective in the public sector is to supply a service of value to the public. The objective of the private sector is to reduce cost and raise profitability in the processing chain.

4- The processing chain is the tool through which the operations of the service/product industry are organized, allowing the provision of services and goods by the processors and their entry into the manufacturing and distribution stage to the end customer. According to the concept of the system, which required interaction and complementarity between all elements of the processing chain and in order to reach the objectives.

5- The successful and effective use of the processing chain by public service organizations contributes to the higher agenda of the government by improving the level of overall efficiency achieved while ensuring that the cash value of the funds is achieved within the competitiveness of not only the level of the first supplier but through each extensive processing base. In order to achieve more efficient processing management.

6- Developments in the area of processing chains caused by changes in the external environment and by scientific, technological, economic, political and global developments, which, in general, have changed the forms of processing chains; to make it capable of meeting the requirements of the rapidly changing environment, and the demands of renewable customers.

7- The performance measurement of the process chain must be done in the light of five areas: cost, quality, flexibility, the speed and time that represent the strategic objectives of operations management in public organizations confirm the interrelationship between the management of the process chain and the management of operations.

8- Information systems developments have had a major impact on the activity and efficiency of the

overall supply chain since the information represents the two supply chain bars through which the performance and activity of the series are determined. The importance of obtaining information has led organizations to adopt the e-series approach, which has led to a clear improvement in the efficiency and effectiveness of processing activity because it has reduced time, cost and effort.

#### **6– 2 Recommendations:**

1- Build and maintain long-term relationships with all partners, promote sharing of information, returns and risks, and collaborate with all parties involved in the chain, with emphasis on sharing the same goals and focusing on customer service.

2- The need to adopt new strategies that are flexible and innovative to meet the volatility of global and domestic demand, and to emphasize the strengthening of the nature of the relationship between the processing chain and the value chain. The relationship between the processing chain and the levels of demand and procurement as the volume of demand affects the elements of the processing chain.

3- Emphasize that infrastructure improvements in the processing chain can be achieved through the functional cross-team formation.

4- Operate on a client/citizen demand forecasting perspective and develop a public service delivery plan that is in line with needs and desires actual and expected.

5- Public organizations should adopt a database on processing activities such as delivery schedules, quality management processes, complaints from process management operators, and process managers in the organization should enhance their interactions with the suppliers and urge them to communicate through modern communication technology mechanisms.

6- As access to competitive advantage and organizational success has become key requirements at the local and global levels, the organizations are beginning to realize that their success is not only achieved in improving their efficiency internally within the organization's surroundings but is

achieved if the strategy of their processing chain is competitive and through all stages of implementation by (Karim.Er rafia.M.,2014:2).

7- Emphasize the need to raise and strengthen the skills and interests of process managers and administrators through courses and development programs to enable them to understand the latest methods and methods used in SC chain management by public organizations in developed countries.

8- Carry out more studies to demonstrate the impact of public organization processing systems and strategies on the effectiveness of public chain management, as well as to help create better applications for the SCM operating within the public service area.

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