

Journal of System Management (JSM) Online ISSN: 2538-1571, Print ISSN: 2322-2301 Doi: <u>10.30495/JSM.2023.1973196.1716</u> **9(2), 2023, pp. 169-181**

RESEARCH ARTICLE

Received: 20/11/2022 Accepted: 03/03/2023

Open Access

The structural Model for Evaluating the Performance of the Sustainable Supply Chain of the Service Sector (Case Example: Social Security Organization)

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Abstract

Service supply chain management is a tool for predicting, planning, implementing, and controlling supply chain processes with the aim of meeting customer needs and gaining their satisfaction, which includes coordination, integration and product control, information, and cash flow within the organization and between partners. The purpose of this article is to evaluate the structural model of the performance of the sustainable supply chain of the service sector (experimental witness: Social Security Organization of the country). The research method was mixed (qualitative-quantitative) and descriptive survey. In the qualitative part, a semi-structured interview was used to collect information, and 15 experts in this field were interviewed. And in a small part, the opinions of 384 experts, managers, and employees of sample social security branches of the country have been used. The results obtained from the qualitative technique with the method of thematic analysis to the inductive approach (based on data) and the model of Brown and Clark (2006) indicate the extraction of 3 dimensions, 10 components and 47 indicators in relation to the dimensions, components and indicators affecting the evaluation of sustainable supply chain performance. He has served in the social security organization of the country. The findings obtained from the quantitative technique using structural equations show favorable reliability and validity coefficients, while the T statistic for all three dimensions is greater than 1.96, which indicates that the mentioned indicators correctly represent this structure. have been measured, and also factor loadings have a value greater than 0.7, which has shown that there is an acceptable correlation between indicators (observable variables) and components (hidden variables) with the main structure (economic dimension). In order to prioritize the dimensions of the supply chain performance evaluation in the social security organization, the best-worst BWM technique was used using LINGO software, and the results showed that the social, economic, and environmental dimensions were ranked first to third, respectively. In the end, practical suggestions for creating an evaluation and encouraging mechanism for sustainable actions in the organization, creating a system for measuring and monitoring the performance of the supply chain, etc were presented.

Keywords: *Performance evaluation, Sustainable supply chain, Service sector*

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Introduction

Today, according to the different attitudes that exist in the field of performance evaluation, we can use this process in the field of supply chain. The proper performance of the supply chain plays a key role in the success of an organization and the sustainable achievement of its goals and especially its profitability (Kin Keung et al., 2021). Due to the increasing emphasis in today's business environment on the chain approach to activities, the issue of supply chain management has occupied the minds of most researchers and executive managers of organizations. In today's economy, the field of competition and conflict has changed from the performance of individual companies to what we call the performance of the supply chain (Nagariya et al., 2021). Supply chain performance refers to the broad activities of the supply chain to meet customer requirements, which include the ability to access products and services, timely delivery performance of services, and timely inventory and capacity necessary in the supply chain for proper performance to meet customer requirements (Sachin et al., 2020). In today's uncertain and highly competitive environment, goods and services are such that it rarely happens that an organization or institution can produce a product or provide a service on its own without seeking help and cooperation with other organizations. One of the approaches used by companies to gain a competitive advantage in such conditions is to use the supply chain (Hou et al., 2019).

Due to the different nature of services, the use of production models in the service sector is associated with limitations, therefore, due to the inappropriateness of productionoriented supply chain models in the service sector, it is necessary to develop the concept of the supply chain in the service sector and a conceptual model for chain management. The provision of services should be defined (Rezaei Pandari & Azar, 2018). Supply chain performance transcends company boundaries; because it includes main materials, parts, sub-assemblies and final products and services and their distribution

through different channels to the end customer (Marzban et al., 2022). In the same way, the performance of the supply chain cuts the functional boundaries of the organization, such as procurement, production, distribution, marketing and sales, and research and development. In this regard, companies and organizations face a big how to evaluate challenge on the performance of business chain activities (Lambert & Cooper, 2000). Effective supply chain management requires performance evaluation. Researchers say that if you can't evaluate the supply chain, you can't control it, and if you can't control it, you can't manage it, and if you can't manage it, you can't improve it. Regarding the creation of performance evaluation systems, one of the most difficult areas is related to the selection performance criteria (Pagell of & Shevchenko, 2014). To be successful in the new business environment, the supply chain needs continuous improvement, and for this purpose, it is necessary to evaluate the performance of the supply chain and extract its performance criteria, and nowadays the senior manager cannot only focus on the company performance of his and organization. Rather, it should pay attention to the performance of the supply chain or network in which the company and organization is one of its partners (Adolf et al., 2018). The competitive field will be supply chain versus supply chain with an emphasis on continuous improvement throughout the supply chain (Tavakkoli et al., 2023). To improve the performance of the supply chain, it is necessary to put aside the old business performance criteria and specify new performance criteria so that instead of the performance of a single business, we can evaluate the performance of the chain (Adolf et al., 2018). One of the new models of the economy is network supply chain management, which continues as a set of methods to manage and coordinate the entire chain, from the management of suppliers to customers (Nagariya et al., 2021). Supply chain management is also like any system and management approach to performance measurement system in order to identify success, determine the degree of fulfillment of customers' needs, help the organization in processes, understanding the discover knowledge that the organization was not aware of before and finally realize improvements. It needs to be planned (Shahbahrami et al., 2020). Performance measurement has had a significant impact on the survival and growth of organizations, so that it has drawn the attention of many researchers and organizations during the last two decades (Seifi, 2016). In this article, on the one hand, due to the importance of the issue of sustainability in the supply chain and the benefits of this approach for the organization, and on the other hand, the lack of a conceptual model to evaluate the performance of the supply chain that could become a business road map in the field of services prompted the researcher to do so. To explain the sustainable service supply chain model to evaluate the performance of the country's social security organization by applying the concepts of sustainability in the service supply chain.

Theoretical Framework

Supply chain: Supply chain is a network of processes aimed at supplying goods and services. This chain includes suppliers, manufacturers, distributors and sellers who cooperate in a coherent way in order to increase the level of customer satisfaction (Mohammadi & Ehtesham Rasi, 2022). Supply chain is a dynamic entity that contains information, product and financial flows. The term supply chain refers to the flow of materials and products, information and money that flows from customers to retailers, then to distributors/wholesalers, then to the final product manufacturer and finally to suppliers and vice versa (Feldman & Muller, 2003).

Evaluation of supply chain performance: Evaluation literally means finding value and price, measuring and checking limits and meeting value. From a managerial point of view, evaluation is considered as one of the scientific attitudes and one of the most important management activities in order to quantify the relationships of important variables and criteria as the basis of analysis, planning, control of management activities and decisions. According to the different attitudes regarding evaluation, this process can also be used in the field of supply chain (Adolf et al., 2018). The proper performance of the supply chain plays a key role in the of an organization and success the sustainable achievement of its goals and especially its profitability. In this regard, it is recommended to establish a supply chain evaluation system in its continuous improvement. Evaluation is a tool that companies provide for themselves to know: has their supply chain improved or degraded? (Rajat & Tmilind Kumar, 2007). Due to the increasing emphasis in today's business environment on the chain approach to activities, the issue of supply chain management has occupied the minds of most researchers and executive managers of organizations. In today's economy, the field of competition and conflict has changed from the performance of individual companies to what we call the performance of the supply chain (Dehghan Khavari & Derakhsh, 2021). Supply chain performance refers to the broad activities of the supply chain to meet customer requirements, which include the ability to access products and services, timely delivery and timely performance of services, inventory and capacity necessary in the supply chain for proper performance to meet customer requirements. The final customer (Sachin et al., 2020). Supply chain transcends company performance boundaries; because it includes main materials, parts, sub-assemblies and final products and services and their distribution through different channels to the end customer. In the same way, the performance of the supply chain cuts the functional boundaries of the organization, such as production, distribution. procurement, marketing and sales, and research and development. In this regard, companies and organizations face a big challenge on how to evaluate the performance of business chain activities (Lambert & Cooper, 2000). Effective supply chain management requires performance evaluation. Researchers say that if you can't evaluate the supply chain, you can't control it, and if you can't control it, you can't manage it, and if you can't manage it, you can't improve it. Regarding the creation of performance evaluation systems, one of the most difficult areas is related to the selection of performance criteria (Pagel & Shevchenko, 2014). To be successful in the new business environment, the supply chain needs continuous improvement, and for this purpose, it is necessary to evaluate the performance of the supply chain and extract its performance criteria, and nowadays the senior manager cannot only focus on the performance of his company and organization. Rather, it should pay attention to the performance of the supply chain or network in which the company and organization is one of its partners (Shahbahrami et al., 2019). The competitive field will be supply chain versus supply chain emphasis with an on continuous improvement throughout the supply chain. To improve the performance of the supply chain, it is necessary to put aside the old business performance criteria and specify new performance criteria so that instead of the performance of a single business, we can evaluate the performance of the chain (Rahchamani et al., 2022). One of the new models of the network economy is supply chain management, which continues as a set of methods to manage and coordinate the entire chain, from the management of suppliers to customers (Shahbahrami et al., 2019). Supply chain management is also like any system and management approach to performance measurement system in order to identify success, determine the degree of fulfillment of customers' needs, help the organization in understanding the processes, discover knowledge that the organization was not aware of before and finally realize improvements. It needs to be planned (Hou et al., 2019). Performance measurement has had a significant impact on the survival and growth of organizations, so that it has

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Sustainability and sustainable supply chain: The concept of sustainability is derived from the word economic growth. In Persian language, growth means getting bigger, and depending on the subject of study, it can be length, weight, surface or volume. Any one of the above states, the conceptual growth is only small; For example, when talking about the growth of a factory's production, it may mean the number or amount of sales in monetary units (Aminifar & Arabi, 2015). Works on supply chain sustainability have mostly focused on environmental impacts, while researchers have brought environmental, economic and social impacts together to form the three aspects of sustainability (Linton et al., 2007). Sustainability in the supply chain as a new and very influential debate has recently attracted the attention of researchers in the field of supply chain management. Today, considering the concept of sustainability in the design of the supply chain network, due to the effects of the growing world population and the resulting increase in human activities, it has become an important issue for organizations, governments and people, especially environmentalists. It refers to the transparent integration and achievement of social, environmental and economic goals of organizations with the effective coordination of intra-organizational processes (Nagariya et al., 2021). The key aspects of applying sustainable supply chain management include the sustainability of the supply chain network and the supply chain environment, the use of environmentally friendly strategies and accepting the fullness of social responsibilities. considering so by sustainability in the supply chain, in addition to considering financial profitability, It also considered adverse environmental effects as well as adverse social effects and minimized them (Aminifar & Arabi, 2015).

Service supply chain: A purely service supply chain is a network of suppliers, service providers, customers and other

supporting units that exchange the resources necessary to produce services, transform these resources into main and supporting services, and deliver these services to customers (Baltacioglu et al., 2007). Also, this two-way system supply chain includes the customer, the service provider, and the primary service producer (Thompson, 2004).

Literature Review

Dehghan Khavari & Derakhsh (2021) analyzed the structure of effective factors in hotel industry service supply chain management using fuzzy cognitive mapping approach. The findings of the research indicate that the three criteria of service quality, advertising and the quality of service level of suppliers are more important than other criteria in the implementation of supply chain management in the hotel industry. In addition to the three criteria mentioned above, which have the highest level of influence and effectiveness in supply chain management, the criteria of customer loyalty and retention, income risk management, rate of return on investment and growth of domestic and foreign market share were placed in the next priority. Shahbahrami et al. (2019) prioritized the effective factors on the management of sustainable drug supply chain in pharmacies of selected educational hospitals. Sadeghi et al. (2019) designed a performance evaluation model of serviceproduct supply chain in home appliance industries using factor analysis and neuralfuzzy networks with a case study of home appliance companies in Iran. Rezaei Pandari & Azar (2017) designed the service supply chain management model with the foundation data theory approach. This qualitative research has been conducted with the ultimate goal of providing a model for service supply chain management in the insurance industry using the systematic design of foundation data theory. Seifi (2015) evaluated the effective factors on improving performance of supply chain the management using the process of hierarchical analysis in the food industry. Faghih et al. (2012) also evaluated the supply

chain of Iran's fixed communication services with the approach of system dynamics. Nagariya et al. (2021) studied sustainable service supply chain management: from a systematic literature review to a conceptual framework for evaluating service supply chain performance. According to them, despite the increasing attention to sustainable service supply chain management, there is no framework to evaluate still the performance of sustainable service supply chain management only. This article has tried to fill this gap and provide a new conceptual framework. An analysis of 174 articles identified by a systematic literature review performed. Researchers identified was components such as environmental management, social management, economic management, customer management, health, safety and risk management, technical sustainability, organizational sustainability, information and technology management. Kin Keung et al. (2021) investigated the relationship between sustainable supply chain and smartness and concluded that the integration of physical and cyber systems is necessary to achieve environmentally friendly logistics, more efficient and safer supply chain, inventory and manufacturing operations. Hou et al. (2019) looking for the richness of product sustainability in terms of green production level, product design reasonableness, product recyclability, raw materials. equipment and accessories, replaceability, etc. .., and also simultaneously measure performance based on economic and environmental performance. Adolf et al. (2018) have presented a quantitative model to the performance of measure an environmentally sustainable supply chain. In their view, the development of robust mechanisms for measuring supply chain performance is recognized as a necessary step for the transition towards sustainable supply chain systems and a greener global economy. Pagel & Shevchenko (2014) in their article state the reasons for continuing research in the field of sustainable supply chain management. Maleki et al., (2013) have presented a general method for large supply

integration chain (lean, agile, resilient/sustainable and green practices). In their research, Carvalho et al. (2012) state that the main purpose of supply chain management design in the past was to minimize costs and optimize services, but today the emphasis is on supply chain flexibility and largeness. Cabral et al. (2012) prioritized the lean, agile, flexible/sustainable and green paradigms based on the key performance indicators of the supply chain, including the service level, cost, time and quality of the automobile manufacturer's products, using the ANP decision-making technique.

Research Methodology

In terms of results, this research is an applied research, and from the point of view of the method, it includes a mixed method (qualitative and quantitative) and it is included in the category of descriptive research and it was conducted as a survey. The target population of the present research in the qualitative section were experts and managers of sample social security branches who had at least 5 years of work experience in this field. They should also be interested in participating and expressing their views and experiences. In this research, 15 semistructured interviews were used by cluster sampling method. From the 13th interview onwards, no new concept was added to the previous concepts, but to ensure theoretical saturation, the process continued until the 20th interview. The duration of each interview varied between 40 and 70 minutes. and the interviews were recorded with the consent of the participants using a tape recorder and then typed word by word on paper and in WORD software, and the participants were Confidentiality of information was assured. In order to analyze the data in this research, the theme analysis strategy and the six-step technique of Clark and Brown (2006) were used. To increase the credibility of the research, the participants

were approached and their opinions were asked about the results obtained. In order to achieve the transferability of the research, the researcher has given a detailed description of the research process from the sampling stage to the interpretation of information. In order to achieve reliability, the researcher has used the guidance and supervision of expert professors throughout the data collection to confirm the researcher's process interpretations. In order to increase the verifiability of the research, the researcher tried to obtain the interpretations and findings of this study through detailed and multiple revisions of the data. The statistical population in the quantitative section was 384 employees of the country's social security branches, who were selected using the cluster sampling method in the country. after dividing it into five regions (North, South, East, West, and Middle). Determining the structural model for evaluating the performance of the sustainable supply chain of services in the country's social security organization was carried out using the structural equation modeling (SEM) technique under SMART PLS software. In addition, in order to prioritize the dimensions of supply chain performance evaluation in the social security organization, the bestworst BWM technique was used using Excel and LINGO software.

Findings

The findings of this article are in two qualitative and quantitative parts, the first part is related to the qualitative phase and the second part is related to the quantitative phase:

Qualitative part: Brown and Clark (2006) have provided a six-step guide in thematic analysis strategy, which is a very useful framework for data analysis, which is used in this article to determine the main, sub- and basic themes has been In Table No. 1, these themes were identified after reviewing and going through the steps:

Social values Special offers

Participation in community projects Preservation of cultural values Active interaction and cooperation with stakeholders

Donations

Table 1

ain and sub-themes Main themes	Sub-themes	Basic theme		
Main themes	Financial	Funds		
Economical	Filialicial	Willingness to pay for sustainability		
		Investment		
		Saving costs for quality services		
		Efficiency in performing services		
	Organizational			
	Organizational	Service development		
		Control and guarantee the quality of services		
		Role of other organizations		
Environmental		Environmental health and safety management		
	Managerial	Attention to the client's environmental demands		
		Environmental responsibilities		
		Environmental policies of the government		
	Rules and policies	Environmental regulations		
		Environmental compliance and audit programs		
		Quality of life of employees		
		Recruitment and retention of employees		
	Staff	Workplace health and safety		
		Wages and benefits		
		Job security		
		Training and education of employees		
		Employee motivation		
Social	Local community	Demographic changes		
		life conditions		
		Access to healthcare facilities		
		Cooperation with the local community		
		Customer satisfaction		
		Customer interaction		
	Customers	Increasing customer awareness		
		Customer expectations		
		Creating value for the customer		
		Complaint rate		
		Organizational norms		

Stakeholder integrity Beneficiaries Responsiveness to stakeholders Stakeholder engagement and commitment Increasing the level of awareness of stakeholders Empowering stakeholders Humanitarian activities Donate to charities

Social responsibility

Organization

Creating a culture of social responsibility Quantitative section: In this section, the findings of the structural equation test are presented by SmartPLS software:



Figure 1. Path coefficient of the dimension model influencing the evaluation of the sustainable supply chain of services



Figure 2. Significant coefficients of the t model of dimensions influencing the evaluation of the sustainable supply chain of services

In the following table, the analysis of the model of the dimensions affecting the evaluation of the sustainable supply chain of services according to the significant values (T-Values), path coefficients, significance level and standard deviation is given:

Table 2

The value of the t statistic, the value of the path coefficient and the standard error of the dimension model affecting the evaluation of the sustainable supply chain of services

Dimensions	Path	Criteria	T statistic	Path coefficient	Standard deviation	Significance level	Result
Dimensions affecting the evaluation of the sustainable supply chain of services		Social	4.755	0.455	0.048	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Environmental	3.032	0.780	0.092	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Economical	3.178	0.705	0.019	0.000	Confirmed
Environmental		Financial	3.966	0.751	0.080	0.000	Confirmed
Social		Organizational	8.380	0.763	0.048	0.000	Confirmed
Social		Managerial	11.935	0.711	0.059	0.000	Confirmed
Social		Rules and policies	5.854	0.809	0.055	0.000	Confirmed
Social	\rightarrow	Staff	3.784	0.642	0.032	0.000	Confirmed
Social	>	Organizational	6.561	0.511	0.111	0.049	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Local community	4.650	0.423	0.108	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Social responsibility	4.963	0.466	0.098	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Customers	8.390	0.565	0.077	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Beneficiaries	7.254	0.544	0.081	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Organizational	3.400	0.843	0.033	0.002	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Financial	5.211	0.868	0.077	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Managerial	3.174	0.746	0.070	0.000	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Customers	3.342	0.455	0.075	0.001	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Local community	2.758	0.567	0.070	0.006	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Beneficiaries	3.054	0.689	0.081	0.002	Confirmed

Dimensions	Path	Criteria	T statistic	Path coefficient	Standard deviation	Significance level	Result
Dimensions affecting the evaluation of the sustainable supply chain of services		Organization	3.135	0.711	0.057	0.003	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Rules and policies	0.778	0.130	0.049	0.437	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Social responsibility	2.567	0.326	0.083	0.011	Confirmed
Dimensions affecting the evaluation of the sustainable supply chain of services		Staff	3.726	0.486	0.069	0.038	Confirmed

Conclusion

This article is done in order to present a model to evaluate the performance of sustainable supply chain in the service sector (experimental evidence: Social Security Organization of the country). For this purpose, the most important criteria related to the three main dimensions of social. economic and environmental factors have been extracted. In the first step, after reviewing related articles and researches; regarding the identification of dimensions, components and indicators affecting the evaluation of the performance of the sustainable supply chain of services in the country's social security organization. Based on the literature on the subject, a set of the most important influencing factors in 57 items, 3 dimensions, 10 components and 47 indicators in relation to the dimensions, components and indicators affecting the evaluation of the performance of the sustainable supply chain of services in the social security organization of the country were identified and then by Smart software. PLS structural model of the dimensions affecting the evaluation of the sustainable supply chain of services was presented. This research, in terms of the influencing factors in the field of sustainable supply chain performance evaluation in some similar studies such as the research of Dehghan Khavari & Derakhsh (2021) about some and financial customer indicators, Shahbahrami et al.(2019) about some

indicators of customers, environmental laws and policies, Sadeghi et al.(2018) about some indicators financial, customers, organizational. Rezaei Pandari & Azar (2018) about some indicators of customers and organizations, Seifi (2015) about some indicators of the organization, Faghih et al. (2012) about some indicators of customers, Nagariya et al. (2021) in About some financial indicators, customers, organization, management, stakeholders, social responsibility, Kin Keung et al. (2021) about some indicators of environmental laws and policies, Hou et al. (2019) about some financial indicators and environmental laws and policies, Adolf et al. (2018) about some indicators of environmental laws and policies, Pagel & Shevchenko (2014) about Some indicators of environmental laws and policies, Maleki et al., (2013) about some financial indicators and customers. Carvalho et al. (2012) about some financial and organizational indicators, Cabral et al. (2012) about some organizational indicators are aligned and corresponds.

Social Security Organization is the second provider of medical services in Iran after the Ministry of Health and Medical Education. One of the topics of medical sociology is the discussion of medical organizations, and social security can be viewed from this point of view, which has received less attention so far, and the organization has been seen as an insurance institution and a pension fund, and its medical department is considered a secondary task of the organization. It is provided to its members, but since the range of social security medical services is significant; its importance in the health and treatment system of the country cannot be hidden. In recent decades, the service sector has taken a significant share of the world economy. The service economy is the driving force of growth for many developing countries. The transfer of industrial economies from the production base to the service axis is a continuous phenomenon (Smith et al., 2007). Currently, services have become very important in developed economies: So that in 2010 in the United States of America, the employment share of the service sector was about 84% and the share of the service sector in the GDP was about 82% (Heksor and Rander, 2013). The service sector in the economy of developing countries like Iran is also of considerable importance, so that in 2012, the share of the service sector in employment in the whole country was about 47%, and the share of the service sector in the gross domestic product was about 50%. Despite the importance of the service sector and its increasing share in the world economy, studies on the supply chain of the service sector compared to the industry sector are very rare and rare due to the inherent problems in the development of a standard sustainable supply chain model and the complexity of their design and delivery processes. Service organizations cannot easily predict a pattern of customer demand for a particular period. This is while services are perishable, that is, if a service is not used at the time it is available, it cannot be stored for future use. All these reasons require the existence of a sustainable supply chain of appropriate services. Most of the sustainable supply chain studies provided a framework on the supply chain of manufacturing industries, and there are few studies on the sustainable service supply chain. In sustainable service supply chain researches, few studies have simultaneously addressed the environmental, social and economic dimensions and their components and indicators.

Suggestions

According to the analysis of the data and the results obtained from them, the following suggestions and solutions are suggested to improve the current situation:

Social dimension:

 \checkmark Improving customer satisfaction (service organizations, especially organizations such as social security, have realized that in order to maintain and improve customer satisfaction, they must have sustainable processes, and this awareness has also emerged in other organizations.)

 \checkmark Complying with laws and standards (every day more and more laws are enacted in relation to the discussion of sustainability, and for this reason, supply chains must also adapt themselves to these laws.)

 \checkmark The participation of all stakeholders to achieve the goals of the sustainable supply chain of social security organization services; *Social security*

 \checkmark Engaging and collaborative relationships with supply chain members;

 \checkmark Training and raising the level of awareness and social skills of supply chain members;

✓ Creating a culture of social responsibility;

✓ Creating value for customers;

✓ Preservation of cultural values

Economic dimension:

✓ Creating a supply chain performance measurement and monitoring system;

 \checkmark Developing a statement of compliance with sustainability requirements;

✓ Payment of costs for sustainability;

 \checkmark Trying to save costs for quality services;

✓ Increasing efficiency in performing services;

 \checkmark Service development;

 \checkmark Control and guarantee the quality of services.

Environmental dimension:

 \checkmark Involvement of employees and proper human resource management;

 \checkmark Evaluation and incentive mechanism for sustainable actions for supply chain members;

 \checkmark Training and raising the level of environmental awareness and skills of supply chain members;

 \checkmark Compilation and implementation of the organization's support policies in order to manage the sustainable supply chain of services;

✓ Creation of environmental service database;

 \checkmark Pursuing the development and compliance with international environmental laws and programs;

✓ Environmental health and safety management;

 \checkmark Paying attention to the client's environmental demands;

 \checkmark Increasing the quality of life of employees.

The researcher of this research suggests that the dimensions obtained from this research should be taken into consideration by the experts and managers of the country's social security organization and other researchers should also quantitatively examine these factors. In addition, the comparative study of sustainable service supply chain patterns and models in Iran with other countries can also be a good topic.

References

- Adolf, A. Taofeeq, I.M. Andrea, G. Godfred, A. Fred, A. Eunice, O.(2018). A Quantitative Model for Environmentally Sustainable Supply Chain. *European Journal of Operational Research*, 269(1), 188-205. doi.org/10.1016/j.ejor.2017.10.057
- Aminifar, Z., & Arabi, M. (2015). Sustainable Supply Chain Management and the Necessity of its Review. International Conference on New Researches in Industrial Management and Engineering, Idea Managers of Ilia Capital, Tehran: Energy Economics Association.
- Baltacioglu, T., Ada, E., Kaplan, M. D., Yurt, O., & Cem Kaplan, Y. (2007). A New Framework for Service Supply Chains. *The Service Industries Journal*, 27(2), 105-124.
- Cabral, I., Espadinha-Cruz, P., Puga-Leal, R., Grilo, A., & Cruz-Machado, V. (2012). "Decisionmaking models for interoperable lean, agile, resilient and green supply chains".

In Proceedings of the International Symposium on the Analytic Hierarchy Process, 1-6.

- Carvalho, H., Duarte, S., & Cruz Machado, V. (2012). Lean, agile, resilient and green: divergencies and synergies. International Journal of Lean Six Sigma, 2(2), 151-179. Doi:10.1108/20401461111135037
- Dehghan Khavari, S., & Derakhsh, S. (2021). An Innovative Throughout Conceptual Model Framework for Logistics Integration. *Iranian Journal of Supply Chain Management*, 23(70), 37-54.
- Faghih, N., Ranaei Kordshooli, H., Mohammadi,
 A., Samadi, A. H., Moosavi Haghighi, M. H.,
 & Ghafournian, M. (2013). Assessment of
 Services Supply Chain of Iran Fixed
 Communications by SystemDynamics
 Approach. *Journal of Industrial Management Perspective*, 3(3), 111-137.
- Feldmann, M., & Muller, S. (2003). An incentive scheme for true information providing in supply chains. *OMEGA*, 31(2), 63-73. doi.org/10.1016/S0305-0483(02)00096-8
- Kin Keung, L., Paulina Golinska, D., & Guoqing, Z. (2021). Smart and Sustainable Supply Chain and Logistics, Mathematical Problems in Engineering, *Mathematical Problems in Engineering*, 24(4), 237-253. https://www.hindawi.com/journals/mpe/si/29 2850/
- Lambert, D. M., & Cooper, M. C. (2000). Issues in supply chain management *.Industrial marketing management*, 29(1), 65-83. doi.org/10.1016/S0019-8501(99)00113-3
- Linton, J.D, Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 1075-1082. Sustainable supply chains: An introduction
- Maleki, M., Espadinha-Cruz, P., Valente, R. P., & Cruz-Machado, V. (2013). Supply Chain Integration Methodology: LARGe Supply Chain Supply Chain Integration. Encontro Nacional de Engenharia e Gestão Industrial. Guimarães, Portugal: ENEGI 2011. www.researchgate.net/publication/30869174 6
- Marzban, S., Shafiee, M., & Mozaffari, M. R. (2022). Four-Stage Supply Chain Design for Perishable Products and Evaluate it by Considering the Triple Dimensions of Sustainability. *Journal of System Management*, 8(4), 109-132. doi: 10.30495/jsm.2022.1966734.1684

- Mohammadi, H., & Ehtesham Rasi, R. (2022).
 Multi-Objective Mathematical Model for Locating Flow Optimization Facilities in Supply Chain of Deteriorating Products. *Journal of System Management*, 8(1), 51-71. doi: 10.30495/jsm.2022.1911221.1468
- Nagariya, R. Kumar, D. Kumar, I. (2021). Sustainable service supply chain management: from a systematic literature review to a conceptual framework for performance evaluation of service only supply chain. *Benchmarking: An International Journal*, 29(4), doi.org/10.1108/BIJ-01-2021-0040
- Pagell, P. and Shevchenko, A. (2014) Why Research in Sustainable Supply Chain Management Should Have No Future. *Journal* of Supply Chain Management, 50(1), 1-32. https://ssrn.com/abstract=2323369
- Rahchamani, S. M., Heydariyeh, S., & Zargar, S. M. (2022). A Model for Identification of Factors Affecting Services Intelligent Supply Chains: A Meta-Synthesis Approach. *Journal* of System Management, 8(3), 13-33. doi: 10.30495/jsm.2022.1957013.1641
- Rajat, B, & Tmilind Kumar, S. (2007).
 Performance Measurement of Supply Chain Management: A Balanced Scorecard Approach. *Computer & Industrial Engineering*.

doi.org/10.1016/j.cie.2007.04.001

- Rezaei Pandari, A., & Azar, A. (2018). Designing Service Supply Chains Management Model by Grounded Theory. *Public Management Researches*, 11(39), 5-32. doi:10.22111/jmr.2018.4009
- Sachin, S. Angappa, G. Shradha, A. (2020). Achieving sustainable performance in a datadriven agriculture supply chain: A review for research and applications. *International Journal of Production Economics*, (219), 179-194. doi.org/10.1016/j.ijpe.2019.05.022
- Sadeghi, A., Azar, A., Valmohammadi, C., & Alirezaei, A. (2019). Designing a product-service supply chain performance evaluation model in the home appliance industry using factor analysis and fuzzy neural networks Case study: home appliance companies in Iran. *Production and Operations Management*, 10(2), 83-123. doi.org/10.22108/jpom.2019.116300.1193
- Seifi, H. (2016). Evaluation of factors affecting the improvement of supply chain management performance using hierarchical analysis process in food industry. *Journal of Value*

Chain Management, 1(2), 1-16. doi:10.1080/09537280701614407

- Shahbahrami, E., Amoozad Mahdiraji, H., Hosseinzadeh, M. (2020). Prioritizing Determinants of Drug sustainable supply chain management in Hospital Pharmacies. *Journal of Health Administration*, 23(2), 89-101. doi: 10.29252/jha.23.2.89
- Tavakkol, P., Nahavandi, B., & Homayounfar, M. (2023). Analyzing the Drivers of Bullwhip Effect in Pharmaceutical Industry's Supply Chain. *Journal of System Management*, 9(1), 97-117. doi: 10.30495/jsm.2022.1966147.1691
- Thompson, B. (2004). Exploratory and Confirmatory Factor Analysis: Understanding Conceptsand Applications. Washington, DC, US: American Psychological Association.