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### THE RELATIONSHIP BETWEEN SUPPLY CHAIN AGILITY AND ORGANIZATIONAL PERFORMANCE IN KSA

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#### **ABSTRACT**

Supply chain agility (SCA) can have a positive or negative impact on organizational performance (OP), which will ultimately lead to increased customer satisfaction, reputation of the organization and revenues and profits of the organization as well. This study analyzed and studied the importance of supply chain agility, and examined how it might affect the organization's overall performance and benefit from this strategy. This study was carried out based on quantitative research method. The sample population was companies working on clothing sector in Jeddah, Saudi Arabia. The sample size was 33 participants. Data collection was doing using online survey. The collected data were analyzed using SPSS software. The findings have shown that the reliability and correlation were accepted the relationship for the hypothesis for supply chain agility and organization's performance. Thus, there is a relationship between SCA and OP. However, the regression analysis showed otherwise as it was rejected. Thus, further analysis of the hypothesis needs to be developed in order for it to fulfill the regression analysis requirement.

#### **INTRODUCTION**

Supply Chain Agility (SCA) means the ability of companies to respond quickly and easily to any change in the environment in order to meet customer needs [1]. Each company must know what can have a positive and negative impact on its overall performance in order to be successful in its field. In addition, the only way to improve the performance of the company is to have an agile supply chain, thus providing a role in improving the overall performance of the supply chain and improving the organizational performance of the supply chain [2]. Supply chain agility is one of the various components that could affect supply chain and organizational performance [3].

Performance organizations help companies to achieve their goals at the end of the day, and by achieving the company's goals, which means that both customer satisfaction and company competitiveness are improved [4]. The organizational performance of the supply chain is divided into three groups. The first category is resource performance and the value is re-added by efficiency. The second category is output performance and is re-add value as the organization's ability to serve high-level customers. While the third is about flexibility performance, it adds value to the ability of the organization to react and respond [5].

Supply Chain (SC) is a range of processes involving transporters, warehouses, retailers, customers, manufacturers and suppliers. In each company, like the manufacturer, the SC includes all the functions needed to meet the needs of the customer [6]. Examples of these functions include new product development, marketing, distribution, finance and customer service. The SC is dynamic between each phase and includes a permanent flow of information products and funds [7]. The main objective for any SC is to meet the requirements of the customer and to make a profit. In addition, SC means that only one person can be involved in each phase.

SCA can be classified as an unexpected and unusual capability that can meet the needs of the customer and wants quickly when the market changes rapidly, and that is a system that provides a high level of complexity and uncertainty in new and developed markets [8]. In addition, supply chain agility is taken into account when organizations have the capacity to respond to new changes in their characteristics, to apply them and to improve them in order to achieve their objectives at the end of the day. In addition, supply chain agility is considering changes in the market conditions of the supply chain in the short term, such as supply disruption and fluctuations in demand [9]. Thus, through SCA, the organization is able to be aware of long-term changes, such as political and social change, economic progress, and delivery time for suppliers. In addition, the integration of demand and supply is an important part of the organization in order to achieve SCA [9].

According to Bidhandi and Valmohammadi [10], the SCA indicators are categorized into four factors, which are speed, responsiveness, and competence and flexibility. Furthermore, according to Gligor et al. [11] by considering the SCA as an operational strength to respond quickly to changes in the environment / markets, it helps to reduce costs as it helps to increase the performance of companies. In addition, the work of Shukor et al. [12] found that the sharing of information, accountability, availability and connectivity has a strong relationship with SCA and has a high impact on SCA and company performance. Moreover, the work of Fayezi et al. [13] has shown that institutional performance has a positive relationship with supply chain performance, where agility, adaptability and alignment of marketing strategies help the corporation to enhance its supply chain efficiency.

That supply chain agility (SCA) can positively or negatively improve the organization performance (OP) [14]. In addition, there is a gap between many organizations in Saudi Arabia, and many companies have not been aware of

the importance of the SCA and its impact on overall performance, how to balance them and what factors can enhance the SCA in order to have a positive impact on the performance of the organization and improve it [15]. Furthermore, the analysis of this strategy will help managers to understand the relationship between supply chain agility and organizational performance and to determine whether or not it has a positive effect on performance and to raise awareness of the two variables [15]. In addition, agility in the supply chain is very important for companies to ultimately achieve good results for their customers and suppliers. Moreover, with the best knowledge of the authors, there is a lack of studies in Saudi Arabia on the same subject [15], and more studies are needed to know which sectors are doing well in their organizations and which more effort is needed.

Thus, this paper has analyzed the relationship between the supply chain agility and the organization's overall performance in Saudi Arabia.

## METHODOLOGY

This work has utilized quantitative research method. The authors conducted this study in a clothing industry that is located in Jeddah, Saudi Arabia. The sample size used in this study is 33. Data collection was done using online survey method. The questionnaires were distributed to the managers and employees, who worked in the Jeddah companies and it, contained 24 questions and all of them are closed-ended questions. The data were analyzed using reliability, correlation, and regression by SPSS software. The hypothesis tested was H1: The supply chain agility (SCA) effect positively the organization's performance (OP).

## RESULT AND DISCUSSION

### *Statistical Analysis*

Table 1 shows the results for Cronbach's Alpha and reliability test for both variables, the SCA and OP in this study. Based on Table 1, the SCA has an acceptable reliability with a level 0.673. On the other hand, OP has an excellent level of reliability with 0.904.

**Table 1:** Cronbach's Alpha

Variables	Cronbach's Alpha
Supply chain agility (SCA)	0.673
Organization's Performance (OP)	0.904

Table 2 shows the correlation analysis result. This matrix also gives the Pearson's Correlation Coefficient between each the two variables in this study; its incentive linkage can fall between 1 to 1. The linkage that shows a 0.00 level means there are no relationship between them, while the linkage that shows a 1.00 level describes that there is a good relationship between the both variables. Thus, based on Table 2, the results represented that; there is a good

correlation between them both, the SCA and OP with a Pearson's Correlation 0.706.

**Table 2:** Correlation Results

		SCA Average	OP Average
SCA Average	Pearson Correlation	1	0.706**
	Sig. (2-tailed)		0.000
	N	33	33
OP Average	Pearson Correlation	0.706**	1
	Sig. (2-tailed)	0.000	
	N	33	33
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 3 shows the regression results. The independent variable in the current study is the supply chain agility, while the dependent variable is the organization's performance. Based on Table 3, the Adjusted R Square rate level for the model is 0.482, which means that only 48% of the organizational performance's changes, or that 48.2% changes in the organization's performance variable happened because of the changes in the independent variable that called supply chain agility. Thus, the results in Table 3 showed that it is rejected and it needs to improve the model and the hypothesis, due to the acceptable regression level should be 0.60 or more, and for the study it shown that it is only 0.482, which means it is less than what is required to be acceptable.

**Table 3:** Model Summary for Regression Analysis

Model	1
R	0.706a
R Square	0.498
Adjusted R Square	0.482
Std Error of the estimate	0.516668691367025

## OVERALL DISCUSSION

All three of the above analyses (reliability, correlation, and regression) are used to test the hypothesis for this research paper. This was done to see whether there is a relationship between the two variables and whether or not supply chain agility has a positive or negative impact on the performance of the organization. Since the author has received 33 responses and 27 of them have worked in that company for more than 5 years, the research has produced good results and the staff / managers will answer the questions with valid information, because they have stayed in that company for a long time and have experience and more knowledge.

As a summary of the findings, the results of this study found that supply chain agility and organizational performance have a good relationship together and are acceptable on the basis of a correlation analysis of the data. This is in agreement with the work of Khan and Wisner [16], where it was found that SCA has a positive relationship with organization performance.

According to the results, the author believes that more studies are needed and that a study needs to be carried out in many different countries and companies in order to have an accurate result and to be able to decide whether or not there is a strong relationship between the two variables.

## CONCLUSION

This work has analyzed the relationship between the supply chain agility and the organization's overall performance in Saudi Arabia. The aim of the study was to examine and test the agility of the supply chain, how it can affect overall organizational performance and how the company can benefit from the implementation of this strategy. Thus, the key findings have shown that the reliability and correlation are assumed for this study and are linked to each other, i.e., H1: the SCA has a positive effect on the OP. While this hypothesis was not supported by the regression analysis, it needs to be improved for further studies.

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