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Khalid Mohammed Alomari, Ali A. Salah,
Ahmad Moh'd Mansour et al.

Supply chain quality and organizational performance: moderating role of competitive advantages

KHALID MOHAMMED ALOMARI
Business Department, College of Business and Economics Business
Al-Hussein Bin Talal University, JORDAN

ALI A. SALAH
Business Department, College of Business and Economics Business
Al-Hussein Bin Talal University, JORDAN

AHMAD MOH'D MANSOUR
Business Department, Faculty of business,
Al-Balqa Applied University, JORDAN

KHALED (M.K) ISMAIL ALSHAKETHEEP
Business Department, College of Business and Economics Business
Al-Hussein Bin Talal University, JORDAN

MOHAMMAD ISSA ALTARAWNEH
Business Department, College of Business and Economics Business
Al-Hussein Bin Talal University, JORDAN

AHMAD ABDULLAH ABU JRAY
Business Department, College of Business and Economics Business
Al-Hussein Bin Talal University, JORDAN

Abstract: - Efficient Supply Chain Management (SCM) has become an extremely flexible means of obtaining market advantages and improving company productivity as there is no longer rivalry within firms but supply chains. Such investigations conceptualize and address five facets of SCM practices (supplier strategic alliance, customer relationships, information exchange, efficiency exchange, and postponement) and examine the correlation with SCM operations, competitive gains, and organizational outcomes. Data was collected from 232 Jordanian individuals, and structural equation analysis was used to assess the connections involved in the research. The results indicate that competitive advantages have a small effect on supply chain efficiency and organizational performance. The comparative edge would therefore specifically and valuably impact corporate performance. This work provides theoretical evidence to support methodological and prescriptive conclusions on the consequences of SCM practices in the literature.

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1. Introduction

When demand expanded and economies became competitive in the 1990s, the complexity of providing goods and services at the best possible time at the lowest cost. Organizations have started to realize that there is no need for greater manufacturing efficiency, but that the whole supply chain will maximize production. SCM is an important foundation for global market continuity and sustainable growth. [4] The Logistics Management Board defines the SCM as an organization-wide and supplies chain organizations constantly strategically converging traditional market processes and approaches to optimize the longer-term productivity of each company and the supply chain as a whole. SCM is primarily concerned with identifying the strategic value of cooperation among trade partners and explaining the dual purpose of SCM: optimizing company efficiency and increasing supply chain output and maximizing the utilization of knowledge and capital flows as a strategic productive tool in the supply chain.

The concept of SCM has been endorsed more and more by scholars, experts, and manager.[11] [39] A few organizations have recognized that SCM is fundamentally important for the survival of sustainable competitive advantage for their goods and/or services in an inherently fragmented world. [16] SCMs were discussed by a range of literature organizations, from acquisition and resource utilization, transportation and storage, business administration, marketing, organizational strategy, and information management structures.[7] Experiments were undertaken to give insight into the different aspects of SCM, including production management and cost assessment. [44] [10]

In the research, in favor of SCM implementation, [5] no advice was given despite a growing emphasis on SCM. The philosophic uncertainty and the biological existence of SCM are responsible for the interdisciplinary origins of SCM. The definition of SCM in literature is not widely accepted. [11] Two separate avenues were discussed under the SCM Concept: manufacturing, development, and transport and logistics management. [39] SCM applies to the consumer base shift to conventional goods and services sourcing and resource allocation practices [2] [19]. SCM is related to centralized shipping and distribution logistics networks and focuses on material management in and outside of the supply chain. [32] Such interactions have slowly become an interconnected SCM that covers any supply chain process.

Therefore, the purpose of this analysis is to examine the context defining SCM practices as cooperation, competitive advantage, and organizational success empirically. A collection of interventions aimed at increasing the efficiency of supply chain operations through the organization, SCM activity were described. As a multi-dimensional network, SCM techniques broaden the supply chain upstream and upstream. Empirically modeling and validating project strategy strategies using sample survey results from respondents. Throughout the study of systematic measurements, unusual activities are tracked. This new study will allow researchers to understand better the existence and actions of SCM, to interact with SCM systems both upstream and downstream, and to help scientists understand how important and affect SCM activities are. The goal of the analysis is to provide valuable advice on assessment, incorporate SCM practices in the business and promote further research in the field through an appropriate SCM review process and a detailed view of the effects of SCM practices on competitive advantages and outcomes.

2. Literature Review

The essence and scope of SCM research are therefore reflected. SCM depends to a large degree on the upstream, downstream, or other dimensions of SCM. [33] SCM is the primary supply chain component. The success of suppliers in strategic procurement alliances, the co-ordination of manufacturer's and the supply /customer performance of products [25] affected supplier relations. [38] A series of case reports and reviewed several cases in the literature on successful SCM in the IT service vendors (e.g SAP, People Friendly, i2, and JD Edwards) and consultancy companies (e.g., Forrester Research and AMR Re-search). This research explores the different yet essential facets of the actions of SCM together. Nevertheless, the validity of previous SCM results is undermined by a system that blends upstream and downstream systems with technological advantages and organizational performance. [5] Some of the other relevant work on this area can be found. [48] [49]

2.1 SCM Process

SCM practices are defined as a collection of operational activities that promote effective supply chain management. Donlon addressed the further development of SCM activities such as production management, recycling, time-saving, seamless connectivity, and information sharing. [9] [39] used SCM structures in their analytical analyzes for order, quality, and demand simulations. The convergence of core competences, the use of interagency, such as EDI, and the deletion of excess volumes of products by limiting the transition of the supply chain to end

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SCM operations are noted in. [1] Tan et al. identify using factor analysis six aspects of SCM service: coordination of the supply Chain, sharing of information, the functionality of the Suffer Chaine, management of customer experience, geographical proximity, and efficiency of JIT. [39][40] Chen and Paulraj, make use of price concessions from vendors, long-term partnerships, cooperation, cross-functional teams, and customer engagement. [3] MIN and MENTZER describe the definition of MCS as compatible with shared goals and expectations, exchange of knowledge, risk and rewards, collaboration, project management, long-term partnerships, and shared leadership of supply chain. To order to improve operational productivity efficiency, the study explores SCM approaches from many perspectives. [23]

Strategic collaboration with manufacturers: the organization and its vendors have a long-term relationship. This seeks, through its strategic and organizational capacities, to expand and allow the company to gain substantial ongoing benefits. [26] Sustainable ties, collaboration, and problem-solving activities are underpinned by a strategic partnership. [12] Such strategic alliances are formed to promote mutual benefit and ongoing cooperation in a main strategic field including technology, energy, and markets. [46] Strategic collaboration with manufacturers allows businesses to work more effectively with a variety of key retailers responsible for the production of goods. Vendors can make more cost-effective design choices feasible by early product development processes, help select the right materials and technologies, and help with the design assessment process. [39] Strategically linked organizations will work together seamlessly to reduce excess energy and resources. [42] At the heart of the state-of-the-art supply chain can be an effective procurement arrangement.[26] Some of the relevant studies can be found. [50]

2.2 Competitive advantage
The comparative advantage consists of the rivalry between the companies and their rivals. [20] [28] This involves the know-how to distinguish between the organization and its competitors and is the product of big policy decisions. As key competitors in quality/cost efficiency, delivery, and usability assessment, the empirical literature was fairly accurate. [40] Recent publications have nevertheless described competition over time as a strategic target. The following foundations were developed: Zhang, have already been investigated, discusses the theoretical sustainability model which takes five things into account:[47] competitive pricing, pricing

efficiency, satisfaction with customers, the productive output which creative development. [18] Cleveland et al. also explains this method of calculation.[6] Price/cost, performance, processing speed, product innovation, and market time are measures of competitive advantage considerations in this study.

2.3 Organizational performance
Economic success is the accomplishment of market-based goals and financial targets of a business. [45] SCM aims mainly at maximizing production, efficiency, and delivery times, while at the same time growing market share and profits for all supply chain players. To predict business actions and calculations over time, financial assessment methods are used. [14] Eventually, any corporate initiative, such as supply chain management, can increase operational performance.

2.4 Development of hypotheses
The SCM model used in this analysis indicates that SCM 's business will have a direct impact on SCM's overall success and SCM's market share growth, revenue boosts and competition rises [34] [29] De Toni & Nassimbeni, were associated with improved services and manufacturer relations. [8] Also, it has been shown that customer participation activities contribute to significant operational performance changes. [38] The increased information exchange leads to lower net costs, higher-order satisfaction rates, and shorter delivery times (Lin et al., 2002).

Hypothesis 1. Firms with large levels of SCM experience should provide lower rates of organizational performance. Not only the organization's average success but also its strategic edge impacts SCM activities. With price/cost, efficiency, production speed, time on the market, and product creativity, the company is projected to increase its competitiveness. Previous work shows that many aspects of competitive advantage (e.g. price/cost) affect the basic components of SCM approaches (e.g., cooperative relations with providers). Cooperation with strategic providing providers, for example, would maximize product performance, reduce sales time, [30] and increase awareness and loyalty to customers. [29] The exchanging of knowledge is driven by parallel production, and selling, of goods by companies, to a high degree of supply chain integration. [15] The exchange of knowledge and accuracy of information are related to consumer loyalty. [19] [43] The delay policy not only improves the stability of the supply chain but also blends global production and consumer response (Van Hoek et al., 1999).

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Hypothesis 2. Firms with high levels of SCM practices will have high levels of competitive advantage. Competency usually means one or two attributes of a company's rivals are to be achieved: cheaper costs, greater efficiency, improved output, and shorter production times. These skills can increase the overall effectiveness of the company. [21] Competitive advantage, along with relationship efficiency, will lead to high economic growth, customer price, and commission rates. Brands who are happier with buyers are less faced with the unpredictable offer and competition changes in their target area. [24] If a corporation manufactures high-quality goods, its profits will increase, thus increasing its scrupulous profit margin and investment returns. A fast-to-market enterprise with high demand growth has become the first company to gain a bigger market share and value in the industry. A useful relationship between competitive advantage and organizational performance can, therefore, be proposed.

Hypothesis 3. The higher the level of competitive advantage, the higher the level of organizational performance.

3. Research methodology

To assess supply chain consistency, operational efficiency, and the moderating effect of the competitive edge of companies in Jordan, an online survey was performed. A concise analysis was carried out after the assessment of various forms of survey methodology (Forza, 2009). The Likert scale, which has been the most widely-used measure, is commonly used to allow participants to reply to particular questions and to indicate whether or not they have a viewpoint (Easterby-Smith et al . 2012) as they are ready to react to each other (Easterby-Smith et al . 2013).

3.1 Process and method for sampling

An online survey was conducted to determine the quality of the supply chain, the organizational performance and the moderating impact of the competitive advantages of firms in Jordan. After the evaluation of various forms of survey methods, a descriptive review was carried out (Forza, 2009). The Likert scale, which was the sort of scale more widely utilized, was often used to allow participants to respond to more specific questions and to show whether they had or did not have an opinion (Easterby-Smith et al . 2012) as they were willing to react to each other (Easterby-Smith et al . 2013). The sampling process followed is snowball sampling and convenience sampling.

The two major hypothesis of the study are as follows:

H_{01}: *There is significance impact of competitive advantage on supply chain quality*
H_{02}: *There is significance impact of competitive advantage on organizational performance*
The secondary hypothesis were also derived based on various tests conducted on the data.

4. Distribution of the results

There have been 232 absolute and open responses, with an response rate of approximately 6.3 percent. One big concern with the business level analysis is that senior management and supervisors have a range of engagement criteria and relatively little funding. Because interdisciplinary work collected knowledge from numerous practical fields, it is vital to extend and take time to the scale and complexity of the analytical instruments. The poor response rate adds more. Although the response rate was less than desirable, it was considered that the composition of the respondent pool was excellent. About 10 % of the respondents were CEO / Chairman / Vice Chief Executive. Around half of the respondents are administrators, including a supply chain manager, plant manager, logistics manager, or IT boss, found by this questionnaire. The fields of expertise included 30% buys, 47% production and 30% distributions / transportation / sales. This shows that respondents have covered all positions, including acquisition, production, distribution, and sales, in a supply chain. Currently, approximately 30 % of respondents have more than one position in their organization and should understand explicitly how SCM is applied.

Table 1: Demographics of the respondents

Variable	Total Responses	Percentage
Number of employees		
100-250	61	26.3
251-500	94	40.5
501-1000	55	23.7
Over 1000	22	9.5
Sales volume in millions		
Under 10	78	33.6
10 - < 25	31	13.4
25 -< 50	37	15.9
50 - <100	9	3.9
Over 100	77	33.2
Job Title		
CEO/President/Vice President	20	8.6

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Director	63	27.1
Manager	100	43.1
Other	49	21.1
Years stayed at the organization		
Under 2 years	109	46.9
2-5 years	40	17.2
6-10 years	73	31.4
Over 10 years	10	4.3

4.1 Demographic Highlights

- Majority of the respondents were from the organizations where the number of employees were between 251-500
- Majority of the respondents were from the organizations wherein the sales volumes in million was under 10 million $
- Majority of the respondents were Managers
- Majority of the respondents had under 2 years of association

4.2 Hypothesis Based on Impact

- Table shows the result of regression analysis use to determine the impact of competitive advantage on supply chain quality. The result shows the impact is positive (coefficient =0.456)
  - H_{01}: There is significance impact of competitive advantage on supply chain quality, therefore, H01 is not acceptable.
- Table shows the result of regression analysis use to determine the impact of competitive advantage on organizational performance. The result shows the impact is positive (coefficient =0.041). Further, this impact is statistically not significant. As sig =0.318>0.05. Therefore, H02 is acceptable.
  - H_{02}: There is significance impact of competitive advantage on organizational performance

Table 2: Regression

S. No	Independent variable	Dependent variable	Coefficient	sig	Result
1	Competitive Advantage	Supply Chain Quality	0.456	0.000	Significance
2	Competitive Advantage	Organizational Performance	0.041	0.318	No significance

4.3 Impact of Demographic variables on Supply Chain Quality

Table 3: ANOVA Results

	Type	Number	Mean	F	Sig	Result
Number of Employees	100-250	61	3.104	1.712	0.183	No sig
	251-500	94	2.986			
	501-1000	55	2.868			
	Over 1000	22	2.956			
Sales	Under 10	173	2.991	3.821	0.052	No sig
	10 - < 25	599	3.029			
	25 -< 50	20	3.212			
	50 - <100	59	3.186			
	Over 100	94	2.9202			
Job Title	CEO/President/Vice President	20	2.958	2.621	0.036	Sig
	Director	63	3.006			
	Manager	100	2.926			
	Other	49	2.830			
Years stayed at the organization	Under 2 years	109	3.000	3.770	0.005	Sig
	2-5 years	40	2.850			
	6-10 years	73	2.868			
	Over 10 years	10	2.933			

The table shows the result of ANOVA test which are used to calculate the significance difference in the value of Supply Chain Quality across:

1. Number of Employees: The result shows that sig = 0.183 which is more than 0.05 (95% level of sig). Therefore there is no significant difference in Supply Chain Quality across number of employees. Hence H19 is acceptable.
2. Sales Volume: The result shows that sig=0.052 which is more than 0.05 (95% level of sig). Therefore there is no significant

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difference in Supply Chain Quality across Sales Volume. Hence, H20 is acceptable

3. Job Title: The result shows that sig=0.036 which is less than 0.05(95%level of sig).Therefore there is significant difference between Supply Chain Quality across Job title. Hence, H21 is not acceptable.

4. Years stayed at the organization: The result shows that sig=0.005 which is less than 0.05 (95% level of sig) Therefore there is significant difference between Supply Chain Quality across Years stayed at the organization. Hence, H22 is not acceptable.

4.4 Impact of Demographic Variables on Organizational Performance

Table 4: ANOVA Results

	Type	Number	Mean	F	Sig	Result
Number of Employees	100-250	61	2.349	2.319	0.101	No sig
	251-500	94	2.3431			
	501-1000	55	2.2180			
	Over 1000	22	2.3088			
Sales	< 10	173	2.3705	1.595	.208	No sig
	10 < 25	599	2.4000			
	25 < 50	20	2.3608			
	50 <100	59	2.3313			
	Over 100	94	2.2641			
Job Title	CEO/President/Vice President	20	2.2363	1.154	0.332	Sig
	Director	63	2.2917			
	Manager	100	2.3283			

	Other	49	2.2582			
Years stayed at the organization	Under 2 years	109	2.3594	2.676	0.002	Sig
	2-5 years	40	2.3320			
	6-10 years	73	2.4127			
	Over 10 years	10	2.3636			

The table shows the result of ANOVA test which are used to calculate the significance difference in the value of Organizational Performance across:

1. Number of Employees: The result shows that sig = 0.101 which is more than 0.05 (95% level of sig). Therefore there is no significant difference in Organizational Performance across number of employees. Hence H19 is acceptable.

2. Sales Volume: The result shows that sig=0.208 which is more than 0.05 (95%level of sig). Therefore there is no significant difference in Organizational Performance across Sales Volume. Hence, H20 is acceptable

3. Job Title: The result shows that sig=0.208 which is more than 0.05 (95% level of sig). Therefore there is no significant difference between Organizational Performance across Job title. Hence, H21 is acceptable.

4. Years stayed at the organization: The result shows that sig=0.002 which is less than 0.05 (95% level of sig) Therefore there is significant difference between Organizational Performance across Years stayed at the organization. Hence, H22 is not acceptable.

4.5 Impact of Demographic Variables on Competitive Advantage

Table 5: ANOVA Results

	Type	Number	Mean	F	Sig	Result
Number of Employees	100-250	61	2.768	1.363	0.258	No sig
	251-500	94	2.644			
	501-1000	55	2.714			

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	Over 1000	22	2.663			
Sales	< 10	173	2.774	0.052	0.821	No sig
	10 < 25	599	2.658			
	25 < 50	20	2.839			
	50 <100	59	2.636			
	Over 100	94	2.601			
Job Title	CEO/President/Vice President	20	2.698	1.827	0.124	No Sig
	Director	63	2.576			
	Manager	100	2.805			
	Other	49	2.656			
Years stayed at the organization	Under 2 years	109	2.575	0.135	0.713	No Sig
	2-5 years	40	2.648			
	6-10 years	73	2.666			
	Over 10 years	10	2.798			

The table shows the result of ANOVA test which are used to calculate the significance difference in the value of Competitive Advantage across:

1. Number of Employees: The result shows that sig = 0.258 which is more than 0.05 (95% level of sig). Therefore there is no significant difference in Competitive Advantage across number of employees. Hence H19 is acceptable.

2. Sales Volume: The result shows that sig=0.821 which is more than 0.05 (95%level of sig). Therefore there is no significant difference in Competitive Advantage across Sales Volume. Hence, H20 is acceptable

3. Job Title: The result shows that sig=0.124 which is more than 0.05(95%level of sig).Therefore there is no significant difference between Competitive Advantage across Job title. Hence, H21 is acceptable.

4. Years stayed at the organization: The result shows that sig=0.713 which is more than 0.05 (95%level of sig)Therefore there is significant difference between Competitive Advantage across Years stayed at the organization. Hence, H22 is acceptable.

4.6 Exploratory Factor Analysis

The key aim of factor analysis is to quantify and interpret the effects. This statistical methodology allows many related variables to be every in independent variables. A collection of fundamental parameters defined as "component" or "dimensions" may analyze the interaction between the various variables. Exploratory factor analysis (EFA) has been used to promote the descriptions of the original variables in fewer variables or parameters.

In the following segment, the factor loads for each variable are shown. Factor loading of 0.3 or higher is deemed appropriate for psychometric purposes.

Table 6: Factor Loadings

S. No.	Items	Extraction
1.	In selecting suppliers, we consider quality as our first criterion.	.662
2.	We address challenges periodically along with our vendors.	.339
3.	We communicate regularly with customers to create efficiency, responsiveness and other expectations for us.	.626
4.	We assess the importance of our relationship with our clients on a regular basis.	.497
5.	We inform trading partners of changing needs in advance.	.426
6.	We and our exchanging partners advise each other about incidents or alterations that that impact the other parties.	.344
7.	The sharing of knowledge between our trading partners and us is necessary.	.390
8.	The exchange of information between our business partners and us is timely.	.437
9.	Our products are modular assembly built.	.686
10.	We delay the assembly of finished products until the end of the supply chain (or the closest customer position).	.799
11.	Market share.	.672

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S. No.	Items	Extraction
12.	Return on investment.	.737
13.	The growth of market share.	.370
14.	Growth in return on investment.	.431
15.	The growth of sales.	.448
16.	Profit margin on sales.	.704
17.	Overall competitive position.	.600
18.	We have fast product development.	.648
19.	We have less time to market than the average industry.	.615
20.	We also launched new goods first to the market.	.537
21.	We deliver product to market quickly.	.665
22.	We respond well to customer demand for "new" features.	.465
23.	We alter our product offerings to meet client needs.	.425
24.	We provide customized products.	.315
25.	We provide dependable delivery.	.422
26.	We deliver customer order on time.	.486
27.	We deliver the kind of products needed.	.438
28.	We supply our consumers with high-quality goods.	.404
29.	We deliver long-lasting goods.	.436
30.	We offer products that are highly reliable.	.459
31.	We are able to offer prices as low or lower than our competitors.	.543
32.	We offer competitive prices.	.652

The above 32 items measure various constructs under study as indicated.

4.8 Reliability Analysis
The degree to which the calculation can be repeated without conflicting results due to a calculation error from instance to instance, has been defined as 'reliability' in Nunnally.[27] Trustworthiness means the reliability of a system to produce comparable results. Since each element takes account of the total reliability estimates, Cronbach alpha is a indicator of reliability (Benjamin & Brezinsky, 2000). Ferris & Fried, 1987.

A stable factor is suggested by the alpha value of Cronbach above 0.7. [27] More than 0.5 reliable is also available in Cronbach alpha (Vashisht, Wadhwa & Uppal, 2012). As in the following table, the alpha value of Cronbach reached the agreed level for each structure.

Table 7: Cronbach Alpha

Construct	Cronbach Alpha	Overall Cronbach Alpha
Supply Chain Quality	.732	
Organizational Performance	.987	.856
Competitive Advantage	.889	

How accurate is the calculation of the instrument (Kimberlin & Winterstein 2008). The truth of a system can be measured by converging and distinguishing truth. Inter-item analysis collaboration offers convergent statements. As previous researchers proposed (Blankson & Kalafatis, 2004), the inter-item correlation values for our sample were 0.7-0.9. Psychometric scale controls ensures that the instrument is sensitive and accurate.

4.7 Confirmatory Factor Analysis (CFA) Measurement Model
The strategic advantage is that a corporation competes with its competitors [20] [28]. This requires the ability to separate the company from its peers and is the product of big policy decisions. [40] As main rivals in the measurement of price / cost-efficiency, distribution and accessibility, scientific literature was very detailed [31] [35][40]. Recent studies have, however, described competition over time as a competitive target. [38] [41] [13], [17] [47]

Table 8: CFA Results

Fit Index	Recommended Value	Value
Chi-Square/ df	<3.0	2.012
GFI	>.80	2.65
AGFI	>.80	.902
RMSEA	<.07	.001
CFI	>.80	2.90
RMR	<.01	.176

Moderation
Table 9: Moderation Results

Relationship	Moderator	Lower	Upper	Result

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		Limit	Limit	
SCQ → Market Performance	CA	-.0365	.2941	No Moderation
SCQ → Financial Performance	CA	-.1372	.1715	No Moderation
OP → Customer Relation	CA	.1113	.0001	Moderation
OP → Level of information sharing	CA	-.0663	.1139	No Moderation
OP → Quality	CA	.1704	.000	Moderation
OP → Strategic Supplier	CA	-.0738	.0940	No Moderation

Multiple linear regression analyses were used to evaluate the modification effects between the consistency of the supply chain, organizational efficiency, and their impact on competitiveness. The calculating impact of the strategic edge between business success and customer partnership and operational efficiency and productivity can be seen from the table above. Moderation experiments were performed to determine if the major encounters have some moderated effect. In the comments on the moderation tables, the appropriate metric indexes using Hu and Bentler (1999) two-index technique for moderation effects are attached. Because of numerous tables created during the analysis, some tables were combined to demonstrate only important interactions. Measuring weights regression on an excel macro known as a statistical tool kit built by Gaskin (2012) was also successful. The moderated experiences were represented by the positive z-score and related signage. A substantial negative z-score indicated a lower correction impact and a significant positive z-score displayed a better assessment impact. Since the z score was positive that means that there was better assessment of the moderation test conducted on the three variables.

In the present research, we analyzed the moderation effect of supply chain efficiency, organizational success against competitive advantages in Jordanian industries, utilizing path-regression analysis. The preliminary analysis shows that the quality of the supply chain affects Jordan's competitive advantage.

However, corporate performance is not directly linked to competitive advantages in Jordan. However, the customer relationship and quality have an indirect effect on organisation's performance via a competitive advantage.

5. Conclusions

This paper analyses the theory that defines the five main aspects of SCM practice and explains the link between SCM practice, competitive advantage and organizational efficiency. This study has been conducted in the Jordanian perspective. It is the first study which has taken the Jordanian firms as part of the study. Three issues have been addressed in the study:

(1) do high-level SCM companies have a strong market advantage;
(2) do high-level SCM companies have a high level of organizational performance;
(3) do high-level competitive advantage organizations have a high level of competitiveness? A comprehensive, reliable and efficient method for assessing SCM operations has been developed to address certain issues. Comprehensive statistical processes including convergent validity, differential validity, precision, tolerance and evaluation of second-order buildings have been used to evaluate the device. This work provides theoretical evidence to support methodological and prescriptive conclusions on the consequences of SCM practices in the literature.

5.1 Impacts and limits of study

In the present research, the SCM model of action is validated which is historically commonly established and which commonly contradicts human expectations. [23] Although several companies understand the value of SCM, they do not know what to do exactly, as they are not aware of a strong collection of SCM activities. The current study provides through the implementation, configuration, and evaluation of a multi-dimensional, functional measure to improve the SCM process and show its usefulness to maximize operational performance and competitive advantage, SCM management provides an important way to assess the integrity of its existing activities. We also shown SCM's second-order system of first-order purchases, customer engagement, knowledge exchange, information exchanging persistence and postponement – five of the main components of the SCM process. An analysis of the relationship between the architecture and SCM research's competitive advantage (hypothesis 2) has revealed the major effect on the competitive advantage of SCM's introduction. Thus, the findings of this study add to SCM's market value.

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SCM strategies are being increasingly embraced in industries with the current competition moving from "intra-companies" to "internal supply chains," except for the rising supply chain costs and market edge. The findings of this analysis reinforce SCM 's opinion that it would greatly affect economic gains and business efficiency.

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