

# Supply Chain Management in Algerian Companies

## The Need for Partnerships with Suppliers

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### إدارة سلسلة التوريد في المؤسسات الجزائرية: الحاجة إلى الشراكات مع الموردين

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#### Abstract:

The aim of this study is to clarify the effective role of companies to manage supply chain to achieve partnerships with suppliers. The approach of supply chain management has great importance to economic companies, so it is necessary to deal with the adoption of supply chain management. As well as we will show the importance of the suppliers as a dynamic element in the supply chain. So it is necessary to clarify the interaction between supply chain management and suppliers. To illustrate this, we conducted a field study in a group of Algerian companies. We used the questionnaire as a tool to analyze the data we obtained using the SPSS program. This study found that the efficient management of supply chain leads the company to achieve partnerships with suppliers.

**Keywords:** Supply Chain Management; Suppliers; Efficiency, Partnerships.

**(JEL) Classification :** M11, M31

#### ملخص:

تهدف هذه الدراسة إلى توضيح الدور الفعال للشركات في إدارة سلسلة التوريد لتحقيق شراكات مع الموردين. مدخل إدارة سلسلة التوريد له أهمية كبيرة للشركات الاقتصادية ، لذلك من الضروري من تبني مدخل إدارة سلسلة التوريد. وكذلك سنبين أهمية الموردين كعنصر ديناميكي في سلسلة التوريد. لذلك من الضروري توضيح التفاعل بين إدارة سلسلة التوريد والموردين. لتوضيح ذلك أجرينا دراسة ميدانية في مجموعة من الشركات الجزائرية. استخدمنا الاستبيان كأداة لتحليل البيانات التي حصلنا عليها باستخدام برنامج SPSS. وجدت هذه الدراسة أن الإدارة الفعالة لسلسلة التوريد تقود الشركة إلى تحقيق شراكات فعالة مع الموردين.

**الكلمات المفتاحية:** إدارة سلسلة التوريد؛ المورد؛ المورد؛ الفعالية؛ الشراكات

**الترميز الاقتصادي (JEL) :** M11؛ M31

## I. Introduction:

The impact of the relationships between supply chain management and suppliers has raised a lot of controversy about its importance and effectiveness on both sides and whichever is the winner, and if we can find that everyone wins. Supply chain management has been a major discovery for the economic firm, as it looks to maximize integration of company with suppliers. And we see rapid developments in many fields, especially supply chain management.

Therefore, companies must take into account these developments by adopting modern administrative approaches, which are a necessity to stay in markets where full competition exists. In addition, David et al. (2008) illustrate that the use of supply chain management leads to the creation of competitive advantages and strengthen the performance of enterprises (p.236).

There are many modern administrative approaches, but what matters is supply chain management as a modern approach that we needed in the management of supply and distribution operations at the company level. It is also necessary to track all activities related to the effective management of raw materials received from the best suppliers in order to produce products which are routed towards distributors in order to obtain a profit margin, and when we manage all of that effectively, then we will gain competitive advantages, especially supplier-related benefits.

- **Problem of the study :**

Companies are looking now for administrative developments and modern entrances in order to keep up with changes taking place. Therefore, institutions must look for ways to improve their production processes and reduce their costs and achieve integration with the parties that work with them, especially suppliers, which raises the following question:

**How can companies effective their role to manage supply chain in order to achieve partnerships with suppliers?**

- **Objectives of the study :**

Through this study, researchers seek to reach a set of objectives:

- ♦ Clarify the essence of the adoption of supply chain management.
- ♦ Focus on the importance of relationship and interaction between supply chain management and suppliers.
- ♦ The company's management of the supply chain with high efficiency leads to maximum integration with suppliers.

- **Importance of the study:**

The importance of this study is to deal with one of the topics that have become the concern of many of the Algerian economic companies, as they tended to adopt modern administrative approaches that support their net result and profits, and even expand their market share.

The issue of supply chain management is one of the modern approaches addressed by the companies, especially when it comes to determining the degree of integration with the suppliers, the importance of the parties in the production process and their contribution to reducing the cost of upgrading the profits of the company and improving the competitive position in the market.

- **Previous studies:**

There are many studies published in this object, we can select that is relied on our question, as the following:

- ♦ Progress Hove (2015): PhD thesis, Vaal University of Technology (South Africa), The supply chain management influence on supply chain performance. This study addressed the effective implementation of practices of the supply chain in companies and between them. The creation of supply chain competitiveness needs e-collaboration of supply chain and sharing important information among partners of the supply chain, which give an affirmation that all of the partners are interesting even the importance of suppliers in all process of supply chain management.
- ♦ Hasti Eiliet (2013). PhD thesis, university of windsor (Canada), Operational Costs Optimization in supply chain for a single supplier manufacturer, university of windsor. This thesis focused on a supply chain for one supplier and one factory, it showed the factory's focus on searching for

appropriate orders in order to obtain the appropriate quantities of materials to reduce the total costs of the operations. The aim of this study is to search for a single resource for the raw materials needed by the company, which are no more than the quantity specified in order to reach the lowest possible cost.

- ◆ Jouni Kauremaa (2010): PhD thesis, University of Helsinki (Finland), studies concerned supply chain management on the utilization of the systems of electronic trading. This study addressed the coordination of mechanisms, in particular, supply chain planning mechanisms for manufacturers. It suggests that information exchange should be aimed at all types of information started by suppliers whom influenced on the prices of raw materials and all information concerning them, and even information about customers or from customers, which must have the accuracy, credibility, and reliability of decision-makers.

- ◆ Jari Collin (2003): PhD thesis, University of Helsinki, talk about how to help the customer in choosing the right supply chain. This thesis focuses on the integration of the supply chain with regard to relations with suppliers, because they are elements in all processes of supply chain management. This thesis aims to identify and describe the main factors that allow the selection of the supply chain of the enterprise to agree with customer requirements and achieve them.

- ◆ Li, S. (2003) PhD thesis, talk about supply chain management practice and how to integrate models that include performance and competitive advantage. This thesis focuses on the search for a model that combines various supply chain management practices (relationships with suppliers, customers, and participating parties) and the way which improves their performance as well as improving supply chain performance, all this will lead to a competitive advantage.

After clarifying the summaries of the previous studies, it is clear that our study differs from these studies with the following characteristics:

- ◆ This study is concerned with clarifying the adoption and the using of supply chain management in the Algerian companies and the extent to which they identified their suppliers.
- ◆ This study shows the extent of interaction and relationships between supply chain management and suppliers and how to influence and affect them.
- ◆ This study refers to the role of supply chain management in achieving partnerships with suppliers in an efficient and effective manner.

#### • Hypothesis of the study:

After identifying the problem of the study we can provide preliminary answers which is the hypothesis of the study and which can receive proofs or negations, which are as follows:

**Companies activate the role of supply chain management to achieve partnerships with suppliers.**

We divide the main hypothesis into three sub-hypotheses:

**First Hypothesis:** Supply chain management has received wide acceptance in terms of adoption in Algerian economic companies.

**Second Hypothesis:** there is a great interaction between supply chain management and suppliers.

**Third Hypothesis:** efficient supply chain management which leads the company to maximum integration with suppliers.

### 1. Theoretical framework and previous studies

#### The core of the adoption of supply chain management:

The concept of management of the supply chain arose in the 1950s, it has been used in the military field. The management of supply chain is defined as “successive steps of production and distribution of a given product from the upstream to the downstream, so, from supplier supplier’s to customer customer’s” (Yves & Michel, 2008, p.5).

The approach of supply chain management is to recognize the great importance of suppliers and customers, which requires producers to pay attention to supplier's suppliers and customer's customers. Therefore, it is important to know that supply chain management involves a long series of processes that producers must know, control and identify with great precision, because if they are carefully controlled and managed these processes then we can talk about a key factor in increasing competitiveness of economic companies adopted such a kind of approach.

Martin (2005) noted that "supply chain management is also the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less cost to the supply chain as a whole" (p.5).

This indicates the critical importance of suppliers in achieving a competitive advantage in terms of reducing the cost of raw material sources. The increase in relations with suppliers has led to the lowest cost, ensuring that the institutions provide raw materials and the suppliers guarantee the disposal of the raw materials they provide, thus ensuring their continued work and achieving a profit margin on the one hand, and on the other hand ensure the company to provide permanent raw materials at the lowest cost and to establish deep relations with suppliers.

One researcher emphasized that "supply chain management is a system that includes a group of people, information, activities and resources that are shared in order to create a product and then convey it to customers in the manner that he pleases" (David et al., 2008. p.236).

Other authors have also defined "supply chain management as design, maintenance, and operation of supply chain processes for satisfaction of end-user needs" (James, 2001.p.7).

These definitions illustrate the importance of supply chain management as a series of integrated processes that start from the supplier supplier's and end with the customer customer's. These integrated operations involve an information system and a range of activities (planning, implementation, control, organization, flow, manufacturing, design, maintenance, distribution), which allows an integrated way to create products at the lowest cost, best quality and greater customer attractiveness.

In order to have a deep understanding of supply chain management, the enterprise must implement, adjust and define supply chain parameters that are centered around eight core processes (Cooper et al., 1997. p.10) as follows:

- ◆ Managing public relations with customers.
- ◆ Service management provided to customers.
- ◆ Demand management.
- ◆ Execution of customer orders.
- ◆ Management of manufacturing flows.
- ◆ Supplier Relationship Management (Croxtton et al, 2001. p14).
- ◆ Product development and marketing.
- ◆ Revenue management (Croxtton et al, 2001. p14)

## **2. Importance of the interaction between supply chain management and suppliers :**

Rao (2002) indicate that Supply Chain Management is those Activities related to the flow of raw materials, information and product manufacturing through suppliers to the final consumer. The flow of information may be in all directions, especially from customers to suppliers. (p.633). This indicates that there is an actual interaction between supply chain management and suppliers. It can be concluded that supply chain management is the integration of activities related to the movement of both raw materials from suppliers and information from all sides (Alexandre, 2001. P15) this leads to achieve continuous improvements on relationships over the supply chain and suppliers help the company to achieve competitive advantage.

Anna (2013) note that supply chain management is also highly regarded by industries and companies, which demonstrate how suppliers and customers are handled and how to create and ensure long-term relationships with them. Which confirms and demonstrates the importance of the interaction between supply chain management and suppliers.

The pressure of global competition calls for strengthening organizational relationships between companies that support them to take a step to improve supply chains and can be a way to enable the rapid response to change (Anna, 2013). Whereas Organizational relationships are interconnected (Rudderg, 2002) between companies which allow for the expansion of the supply chain, where the company examines the supply chains of other companies through regulatory relationships between these companies, which necessarily leads to increase the understanding of the mechanism of relationships in the supply chain.

At present, companies are competing through the resource factor, which is seen as a competitive advantage as well as it is a part of network relationships owned by the company (Anna, 2013). Therefore, the company must identify and deal with important suppliers, he also emphasized the possibility of using the resource as an essential element in adding value (Nagy, 2010), which allows getting many advantages.

Since the supply chain is a network of collective responsibilities for the components of the independent and semi-independent chain of procurement activities (Kuei & Madue, 2002), if supplier suppliers' prices were controlled, this would lead to lower costs, thus allowing for a more competitive position. The enterprise can also use the flow of raw materials, intermediaries, and products to customers effectively through the supply chain at the level of efficiency in the production process.

The ability to understand processes at the supply chain level and follow-on continuous improvements are an important factor for profitability, which is reflected positively on competitive advantage.

### **3. Company's management of the supply chain with high efficiency leads to maximum integration with suppliers:**

It has become clear that the industrial and service companies have witnessed many developments in the administrative side, which made them develop methods consistent with the nature of the marketing environment and deal with it in order to achieve the largest profits to expand market share and expand the network of relations with suppliers by side of the supply. Therefore, the excellent supply chain management requires a focus on the relationships between manufacturers and suppliers and suppliers must be selected through their assessment, sharing of knowledge with them and the ability to negotiate with them (Power et al, 2005).

This indicates the importance of focusing on relationships with suppliers and on the cost element more and more. It was also said: "The costs of our suppliers are in fact our costs." Because we do not force the supplier to send the goods in 90 days, but 30 days is sufficient, it leads to an increase in the cost to the supplier (David et al, 2007).

Thus, in accordance with this principle, it is necessary to deepen relations with suppliers and to strategically manage resources in which there is innovation, flexibility and dealing with suppliers, either through partnership (Slack & Lewis, 2003. p.200), cooperation (Levi & Kaminsky, 2003. p.108) or negotiation (Johnson et al, 2006), all of which is done with a view to reducing the costs of materials and services.

Which emphasizes the need to develop a technology strategy at the level of the supply chain to support decision making and to give a best understanding of the flow of products, services, and information to integrate the capabilities of this chain, within three periods as follows (David et al, 2007. p.06):

In the short term: the system must have the ability to handle day-to-day transactions and e-business through the supply chain, which helps to bring supply and demand together.

In the medium term: the system must be able to conduct planning and decision-making processes, and must also support demand planning, shipping operations, and major production scheduling in order to efficiently and effectively allocate the resources available to the Organization.

In the long term: the system should contribute effectively to adding value to the business by conducting strategic analyzes that help to evaluate both suppliers and their choice (Slack & Lewis, 2003. p.190), as well as evaluation of manufacturing centers, distribution center, and service alternatives.

Responding to market signals and supply chain demand planning according to them with emphasis on consistent forecasts and optimal allocation of resources (David et al., 2007. p.06). Therefore, the company seeks to achieve the best demand, as well as for operations outside the organization to include each of the supply chain episodes which means upstream to downstream, so, from supplier suppliers to customer customers, in the pursuit of collective forecasts, and then the required capabilities are maintained in all operations.

Companies are now aware that the use of this concept of supply chain management integration has become imperative, but the integration of the supply chain, procurement management and operational activities with supply chain participants must be reconsidered. The flow of raw materials, information, components, and finished products are smoothly facilitated from the point of origin to the downstream point of any supplier suppliers to customer customers on the condition of reducing the unit cost and high level of services (Anna, 2013).

## **II. Methods and Materials:**

### **1. Population and sample of the study:**

We choose in our study economic companies that take supply chain management as an approach to manage all processes in supply chain. We selected a group of economic companies active in the state of M'sila as a sample of the study community. We determined the sample of the study in the random stratified sample of the study population.

We distributed the questionnaire to the sample members of the study consisting of (45) companies. (39) Questionnaires were retrieved. After examining the questionnaire, we excluded (8) questionnaires because they disagreed with the required conditions and inconsistencies and not complete the answer in some of them. From this, it can be said that the sample that meets the requirements of the study is (31).

### **2. Study tool:**

The statistical questionnaire was used as a tool of scientific research. The questionnaire was designed according to the theoretical aspect related to the subject of the research. Table -1- shows the axes and the number of paragraphs of the questionnaire.

The use of Likert scale to express the views of the study sample on the paragraphs in the questionnaire, as it is shown in Table -2-.

SPSS 22 was adopted to facilitate the analysis process. We compiled and unpacked the data in the program of SPSS 22, depending on the nature of the information.

### **3. Statistical Methods:**

These methods were used to obtain general indicators about the characteristics of the study population and to describe the variables of the study, including the frequency distribution, percentages, the mean and the standard deviation.

♦ **T test:** This test is used to verify the validity of the hypotheses of this research or not. In addition, the statistical mean was compared and used here to test the importance of each of the paragraphs in the questionnaire from the point of view of each category of sample.

♦ **Coefficient of correlation:** Use the correlation coefficient to find out the relevance of the paragraphs of the questionnaire among them and to know the extent to which the axes of the questionnaire are interrelated.

As we see in table -3-, we figure out that all of the axes are correlated with the general axis. We found that the first axis correlates by 89,4% with the general axis, and we found that the second axis correlates by 87,7% with the general axis, and we found that the third axis correlates by 54,9% with the general axis.

♦ **Alpha Kronbach coefficient:** the test was then reinforced with the Alpha Kronbach in order to know the sincerity and consistency of the paragraphs and themes of the questionnaire in order to determine the validity of this study. The value of alpha Kronbach of this study is 87.8%. Therefore, it is a good percentage that confirms the validity of this tool for this study.

These methods and tools must be presented precisely and clearly without exaggeration so that other researchers can re-examine or verify them. The author can describe the tools and methods used in the form of a scheme, table or diagram to explain methods used, This section is divided into sub-sections, where its contents vary according to the subject matter of the article.

### III. Results and discussion:

#### 1. First Hypothesis: Supply chain management has received wide acceptance in terms of adoption in Algerian economic companies.

Table -4-: The mean values of the study sample for the questionnaire paragraphs were set in the first axis of the first hypothesis as follows:

We found the first paragraph with a mean of 3.93, the second paragraph with a mean of 4.09, the third paragraph with a mean of 3,83, while the fourth paragraph with a mean of 3.90, the fifth paragraph with a mean of 3.87, the mean of the sixth paragraph was 3.96, and finally, the mean of the seventh paragraph, estimated at 4.03, the mean of the eighth paragraph was 3.35. We note that the means are limited between 3.35 and 4.09 and with a standard deviation between 0.98 and 1.27. The second paragraph was ranked first because of its importance to the respondents entitled with "Supply chain management is interested in suppliers".

Table -4- also shows that the means of the first axis of the questionnaire for the first hypothesis were higher and greater than the assumed average of (3) which count it like that  $\frac{1+2+3+4+5}{5} = 3$ , as well as on the values of (t), which were all statistically significant at the  $\alpha$  (0,05), as shown in the table -7-. Thus, the first hypothesis of " Supply chain management has received wide acceptance in terms of adoption in Algerian economic companies" has been achieved and it is confirmed and valid, indicating that the Algerian company adopts the Supply chain widely, so we can say that the supply chain management accepted by companies in Algeria.

#### 2. Second Hypothesis: there is a great interaction between supply chain management and suppliers.

In Table -5-, we show the mean of the study sample on the paragraphs of the questionnaire in the second axis which related by the second hypothesis as follows:

The first with a mean of 3.03, the second with a mean of 3.41, the third with a mean of 3.42, the fourth with a mean of 3.29, the fifth with a mean of 3.35, The mean of the sixth paragraph is

3.29, the mean of the seventh paragraph is estimated at 3.09, while the eighth paragraph was a mean of 3.22.

We note that the means are limited between 3.03 and 3.42 and with a standard deviation between 1.006 and 1.17, and the third paragraph was ranked first because of its importance to the respondents entitled: "The more relationships with suppliers, the lower of costs."

Table -5- also shows that the means of the second axis of the questionnaire for the second hypothesis were higher and greater than the average of 3. The values of t, which were all statistically significant at the alpha level  $(0.05) = \alpha$ , as shown in the table -7-. Thus, the second hypothesis, "There is a great interaction between supply chain management and suppliers " has been achieved, which is confirmed and correct, indicating that the enterprise must, in addition, to adopt the approach of supply chain management, it must take full responsibility in dealing with the interaction between it and its suppliers.

### **3. Third Hypothesis: efficient supply chain management which leads the company to maximum integration with suppliers**

Table -6- shows the means of the study sample on the paragraphs of the questionnaire in the third axis on the third hypothesis as follows:

The first paragraph with a mean of 2.90, the second with a mean of 4.06, the third with a mean of 3.77 While the fourth paragraph was estimated to a mean 4.29, the fifth paragraph mean is 4.21, the mean of the sixth paragraph was 4.38, the mean of the seventh paragraph was 4.12, while the eighth paragraph was with a mean of 4.19.

We note that the means are limited between 2.90 and 4.38 and with a standard deviation between 0.79 and 1.24. Paragraph six was ranked first because of its importance to the respondents, which was called "Integration with suppliers is a competitive perspective that supply chain management must reach".

Table -6- also shows that the means of the third axis of the questionnaire for the third hypothesis were higher and greater than the average of 3. The values of t, which were all statistically significant at the alpha level  $(0.05) = \alpha$ , as shown in the table -7-. Thus, the third hypothesis, " efficient supply chain management which leads the company to maximum integration with suppliers" has been achieved, which is confirmed and correct, indicating and illustrating that the enterprise in the adoption of supply chain management, it must take in account that efficiency in adopting which leads to know how to integrate deeply with suppliers. Thus, it leads to an understanding of integrating might it helps the supply chain management in the company.

We showed through the test of our three hypotheses that the Algerian companies (M'sila companies as an illustration) have understood the adoption and the importance of the development of the Supply Chain Management in the companies in all of the processes. They see the adoption of SCM as the main lever to better deliver their products. Before that, the companies must take into account the relations with supplies as key to competitive by their price of raw materials.

This work which involves the first results of an SCM performance research project in Algerian companies confirms the studies carried out in other countries, in this level of analysis and abstraction. This paper did not reveal specificities in the Algerian case, which can be revealed in our next studies on the other levels of analysis.

### **IV-Conclusion:**

After examining the theoretical assets that dealt with the issue of supply chain management, it turned out to be one of the administrative approaches to managing the processes of supply and distribution at the company level. It follows the activities from the receipt of raw materials from suppliers to the purpose of making products distributed to customers. The company should translate the needs and desires of its future customers in the form of business plans that will contact the

company's suppliers to manage the raw materials and production requirements at the appropriate times to ensure that the customers' wishes are met.

We see that companies are trying to manage the supply chain in all its steps by expanding customer relations, on the one hand, and focusing on relationships with suppliers on the other. Therefore, this leads the company to more understanding of all relationships that it must take into account and make it as money and profitable elements.

The company's perception of suppliers in its supply chains has changed, so, they are not just companies that manage raw materials or production inputs, but they become real partners who are able to maximize the value of the company products and services. Supply chain managers, for example, have become less time-consuming in their pursuit of procurement processes and terms of how to manage supplier relationships and strategic alliances with them.

These administrative aspects are important in making significant use of partnerships with all parties with whom the economic companies deal throughout the supply chain, with the aim of achieving efficiency and effectiveness in meeting the desires of customers and their responsiveness, and a good choice of suppliers and receipt of raw materials in the one hand, and to accelerate the mobility of raw materials received from suppliers and products within the supply chain on the other hand, which in turn allows the enterprise to reconsider the costs that it must focus on in its supply chain, pulls to reduce those costs to a minimum.

## References:

- Alexandre, K.S. (2001). *stratégie logistique, supply chain management*, Dunod, Paris.
- Anna, S. (2013). *costing methods for supply chain management*, 1st Annual International Interdisciplinary Conference, AIIC, 24-26 April, Azores, Portugal.
- Cooper, M. C., Douglas M. L., & Janus D. P. (1997). *supply chain management more than a new name for logistics*, *The International Journal of Logistics Management*, V. 8, No. 1, pp. 1-14.
- Croxton, K. L., Garcia, D. S. J, Lambert, D. M., & Rogers, D. S. (2001). *The supply chain management*, *The International Journal of Logistics Management*, V. 12, No. 2, , 13–36.
- David, J. K., William, J. R., Tomas, G. M., & Hult, D. M. (2008). *best value Supply chain: a key competitive weapon for the 21st century*. *Business Horizons*, V 51, Issue 3, p.p.235-243.
- David L. A., Frank F. B., & Donavon J. F. (2007). *the seven principles of supply chain management*. *supply chain management review*, pp3-8.
- Hasti, E. (2013). *optimization of operational costs for a single supplier–manufacturer supply chain*, university of windsor, Ontario, Canada.
- James, B. A. (2001). *Hand book of supply chain management*. Printed in the United States of America.
- Jouni, K. (2010) : *studies on the utilization of electronic trading systems in supply chain management*, Helsinki University of Technology Department of Industrial Engineering and Management, Finland.
- Levi, D.S. & Kaminsky P. (2003). *Designing the supply chain*. 2 Ed. McGraw Hill.
- Johnson, J.C., Wood, D.F., Wardlow, D.L., & Murphy Jr., P.R., (1999). *Contemporary Logistics*, 7th Edition. Prentice-Hall, Englewood Cliffs, NJ.
- Li, S. (2003). *An integrated model for supply chain management practice, performance and competitive advantage*, Doctoral Dissertation, University of Toledo, United States.
- Martin C. (2005). *Logistique and supply chain management, creating value-adding networks*. Pearson Education, Gears Britain, third edition.
- Progress, H (2015): *The influence of supply chain management on supply chain performance*, Doctoral Dissertation, Vaal University of Technology, South Africa.
- Rao, P, (2002). *greening the supply chain a new initiative in south east asia*, *International Journal of Operation & Production Management*, V22, N6.
- Rudderger M., Klingenberg, N., & Kronhumn, K., (2002). *Collaborative Supply Chain Planning Using Electronic Marketplaces*, *integrated manufacturing systems*, V13, N8.
- Slack. & Lewis M.M. (2003). *Operations strategy*. Prentice Hall,
- Yves, P., & Michel, F. (2008), *Logistique, production, distribution*. soutien, 5eme édition, DUNOD, Paris.

**Appendix:**

**Table -1- axes and number of paragraphs of the questionnaire**

Number of paragraphs	What is included in the axis	Statement	section
8	Supply chain management has received wide acceptance in terms of adoption in Algerian economic companies.	The first axis	1
8	There is a great interaction between supply chain management and suppliers	The second axis	2
8	Efficient supply chain management which leads the company to maximum integration with suppliers	The third axis	3

Source : Prepared by researcher

**Table -2- The five likert scale**

Category Class	Not strongly agree	not agree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

Source: Prepared by researcher

**Table -3- Results of coefficient of correlation**

Generl Axes	Ax3	Ax2	Ax1	
,894**	,124	,814**	1	Ax1
,000	,508	,000		
31	31	31	31	
,877**	,066	1	,814**	Ax2
,000	,726	,000		
31	31	31	31	
,549**	1	,066	,124	Ax3
,009		,726	,508	
31	31	31	31	
1	,549**	,877**	,894**	Generl Axes
	,009	,000	,000	
31	31	31	31	

Source: Prepared by researcher based on the SPSS 22 outputs.

**Table -4- Results of first hypothesis**

Standard deviation	Mean	
1,23654	3,9355	1
1,10619	4,0968	2
1,03591	3,8387	3
1,01176	3,9032	4
1,05647	3,8710	5
0,98265	3,9677	6
1,16859	4,0323	7
1,27928	3,3548	8

Source: Prepared by researcher based on the SPSS 22 outputs.

**Table -5- Results of second hypothesis**

Standard deviation	Mean	
1,07963	3,0323	1
1,05749	3,4194	2
1,14816	3,4208	3
1,13118	3,2903	4
1,05035	3,3548	5
1,00643	3,2903	6
1,10619	3,0968	7
1,17501	3,2258	8

Source: Prepared by researcher based on the SPSS 22 outputs.

**Table -6- Results of third hypothesis**

Standard deviation	Mean	
1,24779	2,9032	<b>1</b>
0,89202	4,0645	<b>2</b>
0,80456	3,7742	<b>3</b>
0,81518	4,2978	<b>4</b>
0,89322	4,2581	<b>5</b>
0,80322	4,3871	<b>6</b>
0,95715	4,1290	<b>7</b>
0,79244	4,1935	<b>8</b>

Source: Prepared by researcher based on the SPSS 22 outputs.

**Table -7- T value to the three axis**

First axis				Second axis				Third axis			
Paragraph	Ddl	T	Sig	Paragraph	Ddl	T	sig	paragraph	ddl	T	Sig
1	30	17,720	,000	1	30	15,638	,000	1	30	12,954	,000
2	30	20,620	,000	2	30	18,003	,000	2	30	25,370	,000
3	30	20,632	,000	3	30	16,581	,000	3	30	26,119	,000
4	30	21,480	,000	4	30	16,195	,000	4	30	29,083	,000
5	30	20,401	,000	5	30	17,784	,000	5	30	26,542	,000
6	30	22,482	,000	6	30	18,203	,000	6	30	30,411	,000
7	30	19,212	,000	7	30	15,587	,000	7	30	24,019	,000
8	30	14,601		8	30	15,285	,000	8	30	29,464	,000

Source: Prepared by researcher based on the SPSS 22 outputs.

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