

THE INFLUENCE OF THE SUPPLY CHAIN MANAGEMENT IN PRODUCTION PROCESSES FOR HIGHER SME MANUFACTURING PERFORMANCE IN MEXICO.

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ABSTRACT

In the present research we have studied the influence of the Supply Chain Management in Production Processes in order to analyze the performance of manufacturing SMEs. This work was performed in the quantitative field in the state of Aguascalientes, Mexico with manufacturing companies in a period between March and April 2012. The samples were 120 companies which occupy between 10 and 250 employees; we designed and applied a survey to managers and companies responsible for this important sector. The simple random sample was based on the record of Mexican corporate industrial system (SIEM, 2010). The measuring instrument consists of 3 blocks which measure the Management of supply chain, production processes and business performance. With the support of EQS 6.1 software and structural equation statistical treatment, we performed exploratory and confirmatory analysis in order to analyze and factor loading of each variable, thereby confirming that there is a positive influence of the supply chain management both production processes and yield of the company. Also, there is a significant influence on the ratio of production processes and the performance of the company. The relationship between the main factors through Cronbach statistic shows that the load is positive and therefore a theoretical model for the study is reliable.

Keywords: Supply Chain Management, Production Processes, Performance, SME Manufacturing

1 INTRODUCTION

Recently, manufacturing companies have had a special interest in partnerships that benefit a particular way for the management of the supply chain (SCM), in order to have competitive advantages (Drew, Joe and Jonathan, 2006). In this sense, the SCM by nature operating within organizations, you need a major performance and management optimization with the procurement, which is now increasingly recognized as a factor of competitiveness for this type manufacturing firms (Wisner, 2003; Aguilera, Hernandez and Lopez, 2012). It is important for a good SCM, to have better control over key elements in the distribution of material resources such as transportation,

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operating costs and inventory management considering the needs of the production processes (Wisner, 2003).

In the present research it is important alongside the view of manufacturing SME entrepreneurs, to have the aim of determine the influence of the SCM in production processes and certainly to analyze its business performance so, determining if the production processes have a positive influence on the performance of manufacturing SMEs also analyze whether the influence of the SCM allows manufacturing SMEs have greater business performance. Because of this, it is necessary that both academics and entrepreneurs to question strongly about the following concerns: SCM practices allow production processes to be more efficient and more profitable for manufacturing SMEs?, Are the production processes through better control allow manufacturing SMEs have greater performance?, Does the GCS through better logistics control, have a significant influence in the SME manufacturing so that it has better performance?

The present research shows significant results in which through statistical processing (analysis with structural equations) with EQS 6.1 software support, the Influence of the Supply Chain Management in Production Processes for greater performance of the SME Manufacturing in Mexico, specifically in the State of Aguascalientes, where the study focused on a simple random sample of 120 Manufacturing companies with field work through a personalized survey managers in organizations period between March and April 2012.

2 REVIEW OF LITERATURE

2.1 Supply Chain Management and Production Processes

For the SME (Small and Medium Business), manufacturing, the link that has the Management Supply Chain (SCM), with production processes, requires special attention to speak of efficiency and productivity, it requires a good management of material resources and good inventory control (Ramirez and Pena, 2011). In this sense, it is necessary to count on the production plan, with a forecast of operation so that the SCM this focused on establishing assurance strategies for acquisitions (Proteous, 1986; Forrester, 1971). It is important to have strategies to help the employer to avoid the level of risk that may arise in the production process by having a poor or no supply (Aguilera et al., 2012).

As important precedent for the operational dynamics of manufacturing SMEs, it is important to note that the SCM is based on controlling the demand for material goods, control of operating costs, process capability and delivery times required for materials and efficient inventory control (Akkermans and Dellaert, 2005). To this end, responsible for control of inventories is committed to creating control models that allow the needs generated by the customer and the market, it is also

useful to consider aspects of flexibility that should be shared with the procurement order to meet the raw material needs and have thus supplies in a timely manner to avoid stoppages of production processes (Sana, 2004; Khouja and Mehrez, 2005, Husseini et al., 2006; Sana et al. 2007a).

The SCM will have a positive impact on production processes provided that among other factors, the employer pay special attention to factors such as better control of the demand forecast, the ordering of the batch materials, avoiding the maximum supply delays, streamline information management and streamline the procurement management (Paik and Bagchi, 2007; Storper and Venables, 2002). In this regard, it is important to note that for the SME manufacturing SCM concept relates to the coordination of supply having as main support logistics contribution of each involved with resource management either raw materials or support materials production processes (Kadadevaramath et al. 2008; Strambach 2002; Daniels, 1999, Roberts, 1998; O'Farrell et al, 1998).

For the best performance of manufacturing SMEs, it is important that the relationship between the SCM and production processes, allow the development and growth of profitable companies with higher levels of competitiveness. To do this, it is elementary that the strategies implemented are focused on improving the use of technology (Williams, 1981), and in better control of inventories and operating costs at all stages involved in the supply chain (Ishii, et al., 1988, Cohen and Moon, 1990). Also, depending on the needs of control over the supply, it is necessary to control and order management in the raw material mainly for SMEs as manufacturing, delivery time, management of costs and the level of demand allow production processes do not have delays in fulfilling customer requirements in (Petrovic et al., 1998, Ettl et al. 2000).

2.2 Production Processes and Performance in Manufacturing SMEs

Today for manufacturing SMEs, it is important that the production processes are reliable and properly managed (Thurm, 2007). Moreover, at present, it is necessary that within productive processes have important technological innovations and improvements in order to improve the levels of control in production processes and thus organizational performance (Bardhan, Mithas and Lin, 2007). In this sense some of the improvements needed in production processes constantly this staff training, implementation of new technologies within the processes and strategies that allow for a reliable process, managed and flexible, thus hardly have compliance issues with the client and have a higher business performance (Taylan, 2006; Ketokivi, 2006; Vernerio and Montanari, 2007). For manufacturing SMEs is important for production processes have administrative control enabling them to have better handling and flow of resources with reference materials production programs generated in coordination with the client's request (Das and Elango, 1995, Maldonado, Martinez, Hernandez, Garcia, 2011), and for this it is important to note that employers should focus their efforts in the implementation of strategies that enable them to streamline compliance in the supply

of raw materials and auxiliary resources, risk reduction in material handling and control information related to the internal production control and supply needs (Bardhan, Whitaker and Mithas, 2006).

On the other hand, it is important to note that at present, the automation of production processes as well as** being required by the nature of the product manufactured and needs to improve productivity rates have not clear that technological improvement is needed, there may be risks that could significantly affect the production process control and efficiency (Kakabadse and Kakabadse, 2002). Today, changes in manufacturing technology in SMEs regardless of the need in production processes for changes requested by the client, they should be evaluated with special attention, since any adjustment and improvement should aim to impact aspects such as quality, safety, productivity and productivity, thus are more likely to have higher performance in these organizations (Jaworski, 1988, Black, 1998, Maldonado et al., 2011).

In order to determine the manufacturing SME has a higher performance it is important to note that the production processes must have an efficient administrative control that would not only be reliable but also production systems available at all times for any request by the client or opening new markets (Ten and Abreu, 2009), and for this, without being exactly a request for a certification body should be given administrative control throughout the process and throughout the company, in order to have confidence in the productive processes and that documentation is used reflects the coordination and control you have within the organization (Tafolla, 2000), for it is important to have manuals, procedures, records and documents necessary to measure productivity, quality and performance the company (Ten and Abreu, 2009; Chan, Xie and Goh, 2000).

2.3 Supply Chain Management and Performance in Manufacturing SMEs

Overall, the SCM is composed of more than two parties which are involved in the control and logistics application whose purpose is focused on more efficient management of material resources in information management and application integration as well as strategies allowing increasing influence business performance in manufacturing SMEs (Biniazzi; Ghahremani; Alipour; Talebian and Akhavan, 2011). In this regard, it is important that employers are really interested to have an efficient control on the specific needs of customers in first place, considering the productive capacity of their companies and secondly, to eliminate the maximum delays of delivery and compliance time products (Cachon and Netessin, 2004).

Also, for manufacturing SMEs, it is elementary that the production processes benefit from the management have to supplied from provider and for this, the SCM requires constantly organized and coordinated with all members of the supply channel (Cachon and Netessin, 2004), thus, it is more likely that some operational activities are key elements for the SCM is more effective and for this, inventory control, warehouse records, and the use of space will not allow to transport easily

which have quality problems or supply (Cruz, 2008; Venkatraman and Ramanujam, 1986). In this sense, it is vital that the SCM complies with reducing inventory costs, reduce production costs, improve the proveduría agreements on just in time and improve customer satisfaction (Barney, 1991; Mentzer; DeWitt and Keebler, 2001).

Today, recognize customer's requirements is fundamental to the manufacturing SMEs to be competitive, and for this, the strategies should be focused on meeting the demands of the market with the required quality, better variety of products and of course meeting the delivery time, this will allow it minimizes supply problem keeping costs to a level that does not affect the performance of the company integrating cooperation strategies, significant support from suppliers, distributors, retailers and related to the management of their supply chains (Weon and Jung, 2009).

Regarding the need for the manufacturing SMEs to be more profitable, it is important that their financial results are a reflection and result of the use of good practices have economic and effective internal controls production (Chun Choon Keong Laosirihongthong and 2011; Porter and Millar, 1985). While these businesses in financial dynamics should focus on ethically coordinate assets, sales strategies and the expected economic benefits, while those responsible for leading these businesses should keep in mind that some of the business goals are in SCM have a reliable, coordinated, integrated, in collaboration with the provider, with total customer satisfaction, establish strategies for customer retention, provide a reliable and constantly improve after-sales service (Johnson and Kaplan, 1987, Stadler, 2005).

3 HYPOTHESIS

In this regard, it is noteworthy that for the SME manufacturing, supply chain management has a significant relationship that positively influences the production process, and that is why the supply management allows these businesses to have significant benefits by allowing the completion of activities in production processes (Kadadevaramath et al., 2008; Singh and Urvashi, 2010, Ramirez and Pena, 2011; Aguilera et al., 2012). In this sense, one can pose the following hypothesis:

H1: The higher supply chain management, the better control of productive processes in manufacturing SMEs.

The performance of companies in general, is influenced by essential reasons that allow these businesses have adequate growth, the proof is the stability in their production processes, (Dess, Rasheed, McLaughlin and Priem, 1995), in the controls are implemented and the strategies that enable organizations to always be available to the needs and requirements from customers where naturally making quality products is paramount (Bettis, Bradley and Hamel, 1992; Maldonado et al.

2011). In this sense, one can now raise the hypothesis concerning the relationship between the production processes and performance.

H2: A better control of productive processes, more improved performance of manufacturing SMEs

Finally, it is important to note that management have adequate supply chain allows the SME manufacturing, have greater control in managing the material resources which are vital to the production processes are effective and thus have a significant increase their performance (Chun, Choon; Laosirihongthong and Keong, 2011; Wisner, 2003), and for this the following hypothesis:

H₃: The higher Supply Chain Management, higher Performance in Manufacturer's SME.

4 METHODOLOGY

In the present research, we analyze the influence of the Supply Chain Management in Production Processes for greater SME Manufacturing Performance in Mexico. For the development of this work we used the database business directory Aguascalientes (SIEM, 2010) where it is mentioned that the state of Aguascalientes, 8661 has the record of which 584 companies are SMEs. The work is empirical, exploratory correlational also which were sampled data from 120 SMEs in the manufacturing sector that has received a measuring instrument type custom survey for managers of these organizations which are responsible for the direction of operations in these kind of businesses. For the development of the measurement instrument used the following blocks: For the block I (Table 1) Supply Chain Management used 20 items measured with Likert scale from 1 to 5 which relate little to high importance (Wisner, 2003).

Table 1: Operationalization of Block I: Supply Chain Management.

CS1	Determine future customer needs.
CS2	Reducing response times across the supply chain Improve.
CS3	Integration of activities across the supply chain.
CS4	The search for new ways to integrate the activities of supply chain system.
CS5	Creating a greater level of confidence in the entire supply chain.
CS6	Increased business capabilities just in time.
CS7	Using an external service provider in supply chain systems.
CS8	Identify and participate in additional supply chains.
CS9	Establish more frequent contact with members of the supply chain.
CS10	Creating a communication of supply chain and information system support.
CS11	Creating formal agreements for information exchange with suppliers and customers existence.
CS12	Informally to share information with suppliers and customers contact.
CS13	Users supply chains for product and customer service feedback.
CS14	Involve all members of the supply chain in the marketing plans of your company product / service communicate.
CS15	Future needs strategic customers along the supply chain.
CS16	Extending supply chains beyond your company's customers and suppliers.

CS17	Communication of your company in the future strategic needs suppliers.
CS18	Participate in marketing efforts for your business clients.
CS19	Participation in sourcing decisions of suppliers your company.
CS20	Teaming supply chain system, including members of the various companies involved.

To block II (Table 2) Productive Process, were used 22-item Likert scale measured 1-5 which relate from low to high importance (Machorro et al., 2007).

Table 2: Operationalization of Block II: Production Processes

PP01	Has automated production processes.
PP02	Has machinery that uses some software.
PP03	Has PLC controlled machinery.
PP04	Has traditional mechanical equipment.
PP05	Has CNC controlled machinery.
PP06	Has automated quality control.
PP07	Has a record of productivity.
PP08	Has a master production.
PP09	Has a control for the production log.
PP10	Has technology that is mostly foreign.
PP11	Features technology developed by the company.
PP12	Has technology that is mostly less than 10 years.
PP13	Has a flexible operation process.
PP14	Operates with a capacity greater than 50 percent.
PP15	Has a statistical process control production.
PP16	Has a process control chart.
PP17	Has a plan for maintenance of machinery and equipment.
PP18	Has a program of Total Productive Maintenance (TPM).
PP19	Has a preventive maintenance program.
PP20	Has a maintenance log of machinery and equipment.
PP21	Has a quality control.
PP22	Has control inputs required in the production

And finally, for block III (Table 3), the measurement of performance scale 18 items were used to analyze the performance focused on the scale proposed by Raymond and St-Pierre (2005).

Table 3: Operationalization of Block III: Performance

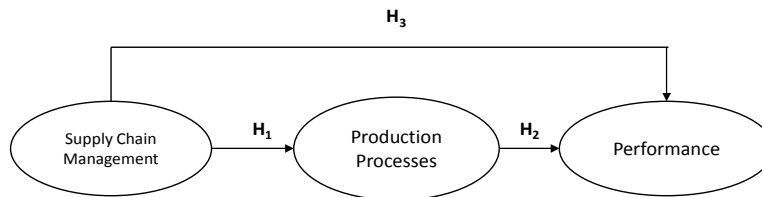
RO1	Increased product quality.
RO2	Improved product delivery time to the customer.
RO3	Effective preventive maintenance.
RO4	Increased product quality.
RO5	Improved product delivery time to the customer.
RO6	Effective preventive maintenance.
RO7	Reduced time process adjustments.
RO8	Control bottlenecks.
RO9	Increased adaptability to any special processing equipment.
RO10	Reduced time process adjustments.
RO11	Control bottlenecks.
RO12	Increased adaptability to any special processing equipment.
RO13	Reduced downtime.
RO14	Reducing the time to develop new products.
RO15	Increased standardized products.
RO16	Reduced downtime.

RO17	Reducing the time to develop new products.
RO18	Increased standardized products.

5 THEORETICAL MODEL

The theoretical model proposed for the present research shows the relationship and structural analysis for confirmatory analysis supported the structural equation model which is presented in Figure 1.

Figure 1 Theoretical Model of the Research



Source: Adaptation of Wisner, 2003; Machorro et al., 2007; Raymond and St-Pierre (2005).

In the present study, we conducted a confirmatory factor analysis (CFA) in order to assess the reliability and validity of the scales of each of the blocks in order to further evaluation of the theoretical model's adaptation to explain its structural relationship. Also, we used a Structural Equation Model (SEM), in order to check whether the structure of the model is properly designed, and for this, we used the maximum likelihood method in EQS software version 6.1, for this, the reliability has been evaluated considering the cronbach α coefficient and composite reliability index (IFC) (Bagozzi and Yi, 1988).

Table 4 shows that all the IFC value exceeded the recommended level of 0.7, which provides evidence of reliability (Nunally and Bernstein, 1994; Hair, Anderson, Tatham and Black, 1995) and suggests that the model provides a good fit ($S-BX2 = 1403.1066$, $df = 737$, $p = 0.0000$, $NFI = 0.904$, $NNFI = 0.952$, $CFI = 0.952$, and $RMSEA = 0.076$), all items related factors are significant ($p < 0.05$), the size of all the factor loadings are greater than 0.6 (Bagozzi and Yi, 1988) and the variance extracted index (EVI) of each pair of constructs is greater than 0.5 recommended by Fornell and Larcker (1981).

For the analysis of structural equations it is important to design a theoretical model in which each of its constructs whose indicators are measured by Likert scales wherever it is possible to analyze the factor loading of each indicator and each construct with the alpha Cronbach and also the variance extracted index. In the model's programming it is important to reflect which indicators correspond with each construct so it could be done an appropriate exploratory analysis.

Table 4: Internal consistency and convergent validity of the theoretical model.

Item	Indicator	t robust	CF > 0.6 factorial charge	Factorial charge to square	Mean of factorial charge	Error	Average error	alpha cronbach > a 0.7	IFC > a 0.7 Composite Reliability of index	IVE > a 0.5, Variance extracted index
Supply Chain Management (F1)	CS1	1.000	0.768	0.590	0.707	0.410	0.499	0.949	0.947	0.900
	CS2	10.370	0.689	0.475		0.525				
	CS3	9.965	0.722	0.521		0.479				
	CS4	7.738	0.703	0.494		0.506				
	CS5	6.932	0.640	0.410		0.590				
	CS6	9.724	0.698	0.487		0.513				
	CS7	10.801	0.665	0.442		0.558				
	CS8	10.483	0.720	0.518		0.482				
	CS9	8.639	0.738	0.545		0.455				
	CS10	10.145	0.713	0.508		0.492				
	CS11	10.542	0.725	0.526		0.474				
	CS14	8.123	0.666	0.444		0.556				
	CS15	11.736	0.687	0.472		0.528				
	CS16	10.213	0.783	0.613		0.387				
	CS17	11.090	0.729	0.531		0.469				
	CS18	6.948	0.685	0.469		0.531				
	CS19	9.637	0.705	0.497		0.503				
	CS20	8.408	0.687	0.472		0.528				
	Σ		12.723	9.014		8.986				
Production Processes (F2)	PP01	1.000	0.742	0.551	0.724	0.449	0.473	0.946	0.943	0.898
	PP02	10.318	0.681	0.464		0.536				
	PP03	16.318	0.832	0.692		0.308				
	PP05	6.899	0.631	0.398		0.602				
	PP06	13.417	0.769	0.591		0.409				
	PP07	9.444	0.622	0.387		0.613				
	PP08	11.695	0.736	0.542		0.458				
	PP09	11.359	0.717	0.514		0.486				
	PP15	13.575	0.736	0.542		0.458				
	PP16	15.979	0.832	0.692		0.308				
	PP17	10.198	0.707	0.500		0.500				
	PP18	11.224	0.721	0.520		0.480				
	PP19	10.093	0.721	0.520		0.480				
	PP20	14.098	0.734	0.539		0.461				
	PP21	11.867	0.676	0.457		0.543				
	Σ		10.857	7.908		7.092				
Performance (F3)	RO1	1.000	0.803	0.645	0.757	0.355	0.420	0.905	0.905	0.848
	RO2	18.083	0.851	0.724		0.276				
	RO3	14.568	0.776	0.602		0.398				
	RO4	14.588	0.758	0.575		0.425				
	RO5	17.342	0.834	0.696		0.304				
	RO6	9.972	0.653	0.426		0.574				
	RO7	7.629	0.624	0.389		0.611				
	Σ		5.299	4.057		2.943				
S-BX2 (df = 737) = 1403.1066; p < 0.0000; NFI = 0.904; NNFI = 0.949; CFI = 0.952; RMSEA = 0.076										

The results of the analysis of internal consistency and validity shown in Table 1 also concern that the factor loading of each indicator shows the reliability of the design of the evaluation's instrument besides there is an acceptable average load factor (greater than 0.7), the values of each construct have an accepted value of alpha cronbach over 0.7, there is an index of variance over 0.5 extracted allowing a good relationship between integrated constructs in the theoretical model

Table 5 presents the results obtained that describe the discriminant validity across two test. First, with a range of 95% confidence level, none of the individual elements of the factor containing the value 1.0 (Anderson and Gerbing, 1988). Second extracted variance between each pair of constructs of the model is superior to its corresponding IVE (Fornell and Larcker, 1981). Therefore, we can conclude that this research shows based on statistical analysis of the results is sufficient evidence of reliability and validity as well as discriminant convergent.

Table 5: Validity discriminant measure of the theoretical model.

Items	SupplyChain Managemen (F1)		Production Processes (F2)		Performance (F3)
Supply Chain Management (F1)	0.900		(0.200)2		(0.302)2
			0.040		0.806
Production Processes (F2)	0.200	0.048	0.898		(0.197)2
	0.104	0.296			0.039
Performance (F3)	0.302	0.052	0.197	0.057	0.848
	0.198	0.406	0.083	0.311	

6 RESULTS

SEM was performed to test the conceptual model structure and contrast hypotheses, using the blocks contained in the instrument of assessment which are described as follows: First block having variables measuring Supply Chain Managing the second block with variables measuring Production Processes and the third block, this is comprised of the variables related to the performance of the company. The nomological validity of the model was analyzed through the performance of the chi-square test, in which the theoretical model was compared with the measurement model (Anderson and Gerbing, 1988; Hatcher, 1994).

Table 6: Results of SEM Conceptual Model SCM

Hypothesis	Structural Relation	Standardized Composite	Robust (t) valor	Size of FIT
H1: The higher supply chain management, the better control of productive processes in manufacturing SMEs	Supply Chain Management $\longrightarrow$ Production Processes	0.427***	9.499	S-BX2 = 1391.6838; df = 731; p = 0.0000; NFI = 0.905; NNFI = 0.949; CFI = 0.952; RMSEA = 0.078
H2: A better control of productive processes, improved performance of manufacturing SMEs	Production Processes $\longrightarrow$ Performance	0.481***	11.279	
H3: The higher Supply Chain Management, higher Performance in Manufacturer's SME.	SupplyChain Management $\longrightarrow$ Performance	0.499***	10.567	

The assumptions made in the present investigation allow to highlight results that are described below: With regard to the first hypothesis H1, the results presented in Table 3 ($\beta = 0.427$, $p < 0.001$), indicating that the Supply Chain Management has a positive influence on Production Processes Manufacturing SMEs. For the second hypothesis H2 results ($\beta = 0.481$, $p < 0.001$), indicating that productive processes have a positive influence on the performance of the SME Manufacturing. And for the third hypothesis H3 results ($\beta = 0.499$, $p < 0.001$) indicate that the Supply Chain Management has a positive influence on the performance of the SME Manufacturing.

7 CONCLUSIONS AND DISCUSSION

The results obtained in this research show elements of interest to be taken into account by employers in an important sector as it is the SME manufacturing primarily by representing economically important regions. SMEs should be noted that besides being an essential part of the

economic engine of Mexico, particularly in the state of Aguascalientes, the small and medium enterprises are an important source of jobs creation and spaces of opportunity for both the employer and the practitioner in generally implement their professional knowledge in order to become directly involved in the development and growth of these businesses.

In this meaning, the study shows clearly in the statistic analysis that the GCS positively influences in the development of the productive processes. The influence of the Supply Chain Management (SCM), in the production process according to the results of this study report that on one hand the SCM is instrumental in supporting the needs and requirements from the customers, this because it works hard to control in delivery times of material resources as this is fundamental to the production processes do not delay their operating times. This leads to employers to take seriously the idea of constantly generate strategies to improve the SCM looking for alternatives that promote the logistics side and on the other hand, the appearance of operating costs.

For this it is essential to have adequate management and collaboration with procurement since this support, it will be easier streamline the supply of materials and thereby also improve the level of trust with the supply chain. For manufacturing SMEs, it is essential that the supply is in a timely manner, to have confidence in the providers and managing the information is accurate and effective since an error with clients would risk the business relationship business with the customer. It is for this reason that the procurement management should be focused on having high levels of reliability and to share the information related to supply needs.

In this regard, it is important to have an integration of all actors involved in the supply of resources since their involvement in the process is key to elementary and compliance of supplies can be smoothly. Of course, employers should have a strategy to have adequate communication systems since a communication error outside having a good delivery system will significantly affect the supply of resources in production processes and thus put at risk compliance with customer deliveries. It is important to fully identify all those involved in the supply channel for the control and management is more beneficial to the goals of manufacturing SMEs.

Regarding the impact of production processes in manufacturing SME performance is important to note that the integration of technologies in enterprises that have adopted these improvements have had results that have benefited the development in these businesses although technological adoptions have not been fully, partially it has enabled operational activity with favorable results. However, it is also important to note that technological adoptions are not simple to implement and on the other hand, if investment is worth considering, this combined training commitment that must be implemented within the organization. The results obtained from this research, show that an efficient productive process allows largely a greater operational performance in SME.

For manufacturing SMEs according to the perception of the entrepreneur in the present research, the reliability of production processes is fundamental so customers are assured that the products are manufactured with quality standards and reliable systems and effective. It is elementary that the organization has control over productivity rates, flexible production plans, control production records for traceability and potential operational control over the functioning of both first-order equipment (production equipment) as support (auxiliary equipment).

Production processes can influence companies and thus have higher performance required in the administrative control have a statistical process control, it is easier to control through constant monitoring process behavior to avoid the production of defective parts. On the other hand, it is important that the production processes management have adequate equipment maintenance thereby considering acquiring auxiliary materials and equipment parts. In the field of quality control, production processes tend to be controlled through the support of process control charts , graphs productivity, daily production logs shiftwork, this means that in case of abnormalities in the parts produced, easily would know how to detect and isolate production batches .

Finally, As it is reflected in the results obtained, the GCS is a key factor for the manufacturing SME to have higher performance and thereby a better business development, it is important to note that performance in organizations depends heavily on having quality products, improve delivery times to customers, have an effective maintenance system, have control over productive systems have efficiency in the supply and a working system that does not affect the economy of the organization and it is important that employers take seriously the control operating costs internally in production processes and in the management systems in supply chains. The employer now has a major challenge that must be focused on having a high-performance company and appropriate strategies for the management of the supply chain has a positive influence on production processes, thus customers would have greater reliability in business activity with manufacturing SMEs.

In previous research studies, Wisner (2003) nárrate that for a better understanding, the GCS must have a close relationship and collaboration with providers, on the other hand, Machorro et al., (2007), gives special importance to have a controlled productive process so the performance is higher; Raymond and St Pierre (2005) concern that the operative performance is mainly due to the cost control and control of operational activity. Therefore in the present research work it is reflected, based on the adaptation of the theoretical model, the importance it has for the Manufacturing SME to get a better GCS so the productive processes don't have productivity and quality problems, and in turn the control over productive processes and the GCS become Key elements for a higher business performance.

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