

Influence of Strategic Levers on Performance of Kenya's Manufacturing Firms Operating under the East African Community Regional Integration

Dr. Samwel Otieno, PhD

Centre for Entrepreneurship, Innovation and Technology Transfer
Technical University of Kenya
P.O. Box 52428-00200, Nairobi
Kenya

Abstract

Manufacturing firms accustomed to operating within domestic markets, encounter performance challenges when venturing into regionally integrated markets. Kenya's manufacturing firms encounter performance challenges while operating under the East African Community regional integration market. Adoption of Strategic levers is an option to remedy the challenge. Strategic levers comprise of rationalization, technology acquisition, automation of production, product quality and regionalization. Regional markets are characterized by increased competition. The study adopted both quantitative and qualitative approaches, with a target population of 216 manufacturing firms and sample size of 138 being considered for the study. The location of the study was Nairobi and surrounding areas. The study sampling frame consisted of 5 sub-sectors out of 14 sub-sectors under Kenya Association of Manufacturers categorization. The findings revealed that, adoption of strategic levers significantly influences performance of Kenya's manufacturing firms operating under East African Community regional integration in terms of Sales, Profits and Employment.

Keywords: Entrepreneurship, Strategic Levers, Competitiveness, Firm Performance, Micro Small Medium Enterprises, Regional Integration

Introduction

Entrepreneurship development is today globally recognized for its immense contribution to the attainment of socio-economic development of countries. In the past, entrepreneurship was recognized for playing a major role towards the development and growth of the Micro, Small and Medium Enterprises (MSMEs) sector; however today, the contribution of entrepreneurship has grown many folds including; influencing performance of manufacturing firms operating under globalized, internationalized and regionalized environments (Adegbite *et al*, 2007). Most MSME manufacturing firms today find themselves operating under changed environments characterized by regionalization and globalization.

The regional and globalized environment is characterized by an increase in competition, increased number of customers, which has compelled MSME manufacturing firms to adopt competitive strategies to exploit profit opportunities within the regional integration market. This scenario is attested by today's global business arena, in which immense contribution to development has been made through entrepreneurship (Luo, 1999). Kenya's manufacturing firms accustomed to operating in domestic markets who extend their operations under the East African Community (EAC) regional integration, encounter performance challenges, hence, the importance of undertaking the study to determine influence of strategic levers on performance of Kenya's manufacturing firms operating under the East African Community regional integration.

According to Knight (1997), the global trend is for firms operating under regional integration regimes, characterised by expanded markets, to adopt strategic levers. These are important competitive strategies for enhanced performance of manufacturing firms. Knight (1997) further avers that, manufacturing firms operating in countries which are members of a regional integration regime have their performance directly influenced by strategic levers.

An overview of regional integration

Fondad, (2005) avers that, regional integration is the coming together of two or more states, normally through reciprocal preferential agreements. According to Knight (1997), the benefits of regional integration includes the ability to foster competition, subsidiarity, access to wider markets, larger and diversified investment and production; and socio-economic and political stability for countries involved.

The positive experiences or regional integration are multi-dimensional in nature and encompass movement of goods and services; capital and labour; infrastructure development; environmental management; and reforms in other public goods such as governance; peace; defence and security. Adegbite (2007) avers that, despite the positive aspects of regional integration, enterprises still encounter challenges which are not only limited to perceived real gains or losses for firms of member countries, but also to increased competition among suppliers of goods and providers of services within the regional integration area. The challenges are experienced due to differences in customer tastes and preferences for products and services produced within the region.

The success of regional integration is pegged on strong commitment by member countries in the implementation of the agreed arrangements, fair mechanisms to arbitrate disputes and equitable distribution of the gains and costs of regional integration (EAC, 2010). East African Community (EAC) is one of the regional integration regimes in Africa. EAC comprises of Kenya, Uganda, Tanzania, Rwanda and Burundi (EAC, 2010). Most, if not all of the characteristics of regional integration regimes which exist in other parts of the world also prevail within the EAC regional integration area. The coming into force of EAC regional integration has necessitated the need for manufacturing firms in Kenya to embrace strategic levers as an important strategy in influencing their performance.

According to Wiklund and Shepherd (2005), the challenges of regionalization are in form of increased number of competing firms, lower production and marketing costs, larger market and greater pressure on firms to regionalize, hence, the need to embrace strategic levers as an important influencer of manufacturing firm performance under regional integration regimes.

Importance of Strategic Levers

Expectations among entrepreneurs are usually high when they expand their manufacturing firm operations beyond the domestic market to regional integration markets. However, the initial high expectations are not usually met; instead, most manufacturing firms encounter performance challenges. In order for the entrepreneurs to realize these expectations, it is imperative for them to adopt strategic levers, which are recognized as the changed characteristics of macro-environmental factors which impacts on performance of manufacturing firms (Knight, 1997). The changed macro-environmental factors include rationalization, technology acquisition, automation of production, product quality and regionalization.

According to Hofer and Schendel (1978), strategic levers are the processes that manufacturing firms adopt in order to address the changed environmental conditions precipitated by transition to free trade, as a means of maintaining or enhancing firm performance. The changed external environment is one route that manufacturing firms pursue in generating creating ideas that lead to enhanced performance of manufacturing firms. It provokes innovative thinking and embracing of new strategies. It further enhances detection of threats on performance of manufacturing firms and facilitates institutionalization of appropriate strategies to overcome threats by neutralizing them. It is on this understanding that strategic levers' influence on performance of manufacturing firms operating under a regional integration configuration is studied.

Literature Review

Theories on strategic levers are the gist upon which the study was anchored. The theories are critical in enhancing understanding and appreciation of how strategic levers influence firm performance under a regional integration context.

Theory on Strategic Levers (SL)

According to Hofer and Schendel (1978), strategic levers are the processes that manufacturing firms adopt to address the changing environmental conditions precipitated by transition from domestic to regional and global markets. The strategic levers comprise of rationalization, technology acquisition, automation of production, product quality and regionalization.

Rationalization

Rationalization is the process through which manufacturing firms configure channels and other operations across a larger expanded market under regional integration context. According to Toyne and Walters (1993), rationalization involves streamlining of key activities intended to optimize scale and scope efficiencies. It is the process of doing away with products or processes which do not add value to the successful operations of the firm.

According to Lumpkin and Dess (2000), rationalization is the reorganization of manufacturing firms in order to increase their efficiency. The reorganization may lead to an expansion or reduction in the firm size, a change of policy or alteration of strategy pertaining to manufacture particular products.

Rationalization is further understood as the selling off or closing down of some plants or units to be more in line with the manufacturing firm's core competencies in the interest of efficiency, or as a cost cutting measure in a changed environment. Rationalization when carried out on an on-going basis, enables manufacturing firms to arrive at key decisions which include; maintaining, enhancing, retiring or combining the different aspects of manufacturing production processes. Rationalization is therefore, a strategy to weed out redundant applications and overlapping functions in the production process. The objectives of rationalization are to: - (i) implement a saving or reduction on the operational costs; (ii) simplify the application landscape; (iii) expedite deployment of new services; (iv) minimize cost of deployment of new services; (v) ease of operational support; (vi) reduction of points of failure; and (vii) predicting performance and scalability more accurately for manufacturing firms operating within a regional integration context (Knight, 1997).

In a nutshell, rationalization is the application of efficiency and effectiveness measures to a manufacturing firm with the objective of increasing a firm's competitiveness, efficiency and effectiveness. It is therefore, the modernization of manufacturing firms to increase their competitiveness by introducing new measures meant to increase their efficiency and effectiveness by replacing obsolete equipments or processes with new equipments or processes meant to enhance efficiency.

Technology Acquisition

Technology acquisition is the process by which manufacturing firms acquire rights to use and exploit technology for the purpose of improving or renewing their processes, products or services. Technology acquisition is therefore, the foundation upon which innovation is anchored. It enables manufacturing firms to respond to the changed conditions in their external environment as a result of regional integration (Szymanski, *et al*, 1993). Through technology acquisition, firms are enabled to tailor their products or services to suit demands of new market opportunities, meet strict product standards, or make products more universally desirable. The constant need for technology acquisition is necessitated by the period between the development phase of products or services and their replacement by a more advanced or differentiated versions (Eden, 1994).

Technology acquisition strategies are of great importance to manufacturing firms that are in the innovation intensive industries. These firms are often faced with make or buy decisions in terms of whether to develop new products or utilize their in-house research. They are further faced with the options of whether to develop capabilities or to acquire the rights to an invention developed outside the boundary of the firm. According to Mosey (2005), technology acquisition is a key competency for manufacturing firms operating under a regional integration regime. He avers that, the main reason why manufacturing firms embrace technology acquisition developed externally is to allocate limited resources more effectively in order to reduce costs and gain advanced technological know-how quickly over competitors.

Most manufacturing firms opt for acquisition of technology developed externally when there is incapability of in-house development of new technology. Mosey (2005) further avers that, the problem in acquiring technology externally are:- (i) the dependence on the source of technology; (ii) the transaction costs to search, negotiate, execute and enforce the contract; (iii) the need to adapt and fine tune the technology; and (iv) the need to rationalize the price of technology which may be overpriced. Therefore, there is need to compare internal technology development and external technology acquisition.

Automation of Production

Automation is the use of control systems and information technologies to reduce the need for human intervention. It plays an important role in the world economy and in daily experiences in manufacturing firms. Automation of production increases efficiency and effectiveness in the operations of the firm by increasing a firm's competitiveness and profitability within the context of expanded markets. Automation of production leads to increased productivity, expanded capacity, lower manufacturing costs, greater flexibility all permitting manufacturing firms to become more globally competitive (Porter, 1990; Eden, 1994).

According to Eden (1994), to meet the increasing demand for productivity gains, manufacturers continually ask factory workers to do more with equipments in a small factory floor space. The most automated assembly lines make factory floors as efficient as possible, boosting the bottom line in a highly competitive regional market.

Automation of production is therefore, the development of mechanized production in which the control and monitoring functions previously performed by humans are transferred to instruments and automatic devices. Automation of production is therefore, the basis upon which the development of modern industry is anchored and is generally a trend in technological progress.

The objective for automation of production is to improve the efficiency of labour and the quality of manufactured products. Automation of production creates conditions for the optimum utilization of all production resources which can be undertaken in partial, integrated, or total automation.

Partial automation of production is the automation of specific production operations and is achieved in cases where process control is practically inaccessible to human effort because of the complexity or rapidity of the process and; where simple automatic devices can effectively replace human labour. The generally accepted rule is that, working production equipment is best partially automated, and as such; automation equipment is perfected and expanded. Therefore, partial automation is found to be most effective where manufacturing equipment is designed to be automated from the outset.

Integrated automation of production is where the production section, the production shop, the plant, or the electric power station, functions as a unified interrelated automated complex. Integrated automation of production encompasses all the basic functions of the manufacturing firm, or service. It is feasible only in the case of highly developed production based on modern technology and sophisticated methods of control using highly reliable production equipments acting according to a pre-specified or self-adaptive program. The human function is limited to overall monitoring and control of the entire complex.

Total automation of production is the highest level of automation. It provides for the transfer of all functions involving control and monitoring of complex automated production to automatic control systems. Total automation is usually used in situations in which human access is impossible or where conditions are hazardous to human health or life. According to Feigenbaum (2007), factors determining the degree of automation are primarily cost and feasibility under specific production conditions. Automation of production does not imply a complete displacement of human workers by automatons, but, the direction of human labour activities and human-machine interactions. Human labour therefore, acquires new qualitative nuances by becoming more complex and meaningful. The main human labour activities are transferred to technical servicing of automatic machinery, analytic and administrative activities.

The proportion of scientific and technical workers in the production process increases rapidly. They are needed not only to keep the complicated equipment functioning normally, but also, to devise and design new and more sophisticated equipments. Automation of production is therefore, one of the basic factors in the modern scientific and technical revolution which is opening up unprecedented opportunities for mankind to transform nature, create enormous material wealth, and multiply the creative capabilities of humanity. Zahra and Garvis (2000) aver that, the development of automation of production involves the designing of self-acting devices, prototypes of modern automated machinery.

The industrial revolution of the 18th century, created the necessary conditions for mechanizing production in spinning, weaving, metalworking, and woodworking. The process further included a new direction of technical progress and prompted transition from using individual machines to automatic system of machinery, in which the human performed cognitive functions of control. Human beings would only then act in unison with the production process as its inspector and operator. Knight (1997) identifies automation of production as one of the essential strategies that enhances performance of manufacturing firms operating under regional integration context. Manufacturing firms which automate their production lines are able to produce en-masse to meet increased demand for manufacturing firm's products or services within a regional integration area.

Product Quality

Product Quality is the fundamental characteristic of products that meet or exceed customer expectations regarding features and performance (Knight, 2007). It is linked to improved competitiveness and improved performance in expanded markets (Bharadwaj & Varadarajan, 1993). Product quality enables end-users to compare across a greater variety of product brands from a large number of competing firms. Under such conditions, customer's expectations of quality are apt to grow. Manufacturing firms are therefore, inclined to benchmark their quality standards against those of cross-regional competitors leading to pressure for them to adopt continual improvement strategies.

With the increasing competition, makers of parts, components, and finished goods are compelled to invest in quality to retain, recapture or attract new customers (Karloff, 1994). According to Porter (1990); there are three views for describing the overall quality of a product.

The first is the view of the manufacturer, who is primarily concerned with the design, engineering, and manufacturing processes involved in fabricating the products. Quality is measured by the degree of conformance to predetermined specifications and standards. Deviations from the predetermined standards lead to poor quality and low reliability. Efforts for quality improvement are aimed at eliminating defects which are out of conformance, thereby reducing scrap or rework which ultimately leads to overall reduction in production costs.

The perspective of the consumers or users is the second view. To consumers, a high-quality product or service is considered to be that product or service which satisfies their preferences and expectations. While the third view relates to consideration of the product quality itself as a system. It incorporates those characteristics that pertain directly to the operation and functionality of the product. Juran *et al.*, (1995), aver that, Quality Control (QC) is the collection of methods and techniques that ensures that a product or service is produced and delivered according to given requirements or specifications. It is considered as the collection of features and characteristics of a product that contributes to its ability to meet given requirements. This includes the development of specifications and standards, performance measures, tracking procedures, and corrective actions to maintain quality control.

According to Deming (1986), concurrent engineering, quality function deployment, and Total Quality Management (TQM) are modern management approaches for improving quality through effective planning and integration of design, manufacturing, and materials management functions throughout an organization.

Regionalization

Regionalization is the coming together of states or countries to form a regional integration area for the purpose of attaining socio-economic and political development agenda (EAC, 2010). Regionalization therefore, avails opportunity for manufacturing firms to expand their activities or operations beyond the domestic market. Regionalization therefore, acts as a catalyst to manufacturing firms to gather foreign market information, transform their products and processes to suit local needs, and commitment of resources to achieve regional goals. It is therefore, important for member countries to harmonize regional tariff and remove investment barriers with the objective of reducing foreign investment risk and trade-related transactions costs (Porter, 1990).

Firms perceive regionalization as a means to pursue new market opportunities, which compensates for domestic market and increases profits. The objectives of manufacturing firms operating under regional integration configuration are to maximize a firm's desired performance outcomes, profitability, sales, and market share. Theories on regionalization therefore, help in understanding the contemporary debate about regionalization and globalization. Levitt (1983), argued for many years, that there is an increasing commonality across national borders such that firms can think of selling the same product or service in the same manner around the world.

However, there exists evidence of increased homogenization, and it is argued that the world's trade, foreign direct investments, international transportation, and international telecommunications activities have all increased over time. Rugman and Verbeke (2007) posit that, increases in trade occur predominantly within each broad regional integration area. They further aver that, theories on regionalization help explain the existence and functioning of manufacturing firms operating under regional integration areas. Regionalization do avail numerous opportunities to manufacturing firms including the ability to sell to a larger market, utilization of location economies, using experiences learned in various markets to enhance core competencies, and the development and transfer of skills between subsidiaries and headquarters.

However, despite the opportunities availed by regionalization, there exists challenges that constrain the ability of manufacturing firms to fully reap the resultant benefits. It is instructive that enterprises which successfully develop products for the domestic market, and believe that, there is a large consumer base for the product across the globe, encounter challenges as the tastes and preferences of consumers vary across nations and thereby force the firms to customize their products to the market needs in order to succeed. Differentiation of products therefore, leads to cost escalation resulting in erosion of profit margins. Since localization leads to higher costs, companies aspiring to go regional with generic or common products are likely to encounter significant disadvantage compared to their competitors.

Main Objective

The main objective of the study was to establish the influence of Strategic Levers (SL) on performance of Kenya's manufacturing firms operating under the East African Community regional integration.

Specific Objectives

1. To establish the level of adoption of Strategic Levers (SL) by Kenya's manufacturing firms operating under the East African Community (EAC) regional integration.
2. To determine the significance of the East African Community (EAC) regional integration as a moderator of Strategic Levers (SL) on performance of Kenya's manufacturing firms.
3. To establish the significance of adoption of Strategic Levers (SL) on performance of Kenya's manufacturing firms operating under the East African Community regional integration.

Research Questions

1. What is the level of adoption of Strategic Levers (SL) by Kenya's manufacturing firms operating under the East African Community (EAC) regional integration?
2. What is the significance of the East African Community (EAC) regional integration as a moderator of Strategic Levers on performance of Kenya's manufacturing firms?
3. Is there a significant relationship between performance of manufacturing firms in Kenya and adoption of Strategic Levers for manufacturing firms operating under the East African Community regional integration?

Research Methodology

The study adopted both quantitative and qualitative exploratory research design. Quantitative research design focused on the designs, techniques and measures that produced discreet numerical or quantifiable data (Kothari, 2007). Further, quantitative approach was strongly linked to answering research questions, which were directly linked to specific objectives of the study. Qualitative approaches were useful in enhancing understanding of social constructs and meanings as alluded to by Kothari (2007); and Saunders *et al* (2003) who together aver that, qualitative approaches seek to explain constructs and phenomena that are not statistically significant or quantitative in nature and is a good tool for analyzing social scenarios.

Both approaches were used to determine the level of influence of strategic levers on the performance of manufacturing firms in Kenya operating under the East African Community regional integration. The first step involved determining the level of adoption of the strategic levers by Kenya's manufacturing firms, followed by ranking (considered as weights) of the different aspects of strategic levers in terms of perceived influence by the respondents. Finally, an analysis of the collected data was undertaken to determine the findings on the level of influence and significance of strategic levers on Kenya's manufacturing firms operating under the East African Community (EAC) regional integration.

The research study was undertaken within Nairobi and surrounding areas, in which there are 525 of the 698 manufacturing firms registered by the Kenya Association of Manufacturers (KAM) database (KAM, 2010). Out of the 14 sub-sectors of KAM, 5 sub-sectors were identified based on their contribution of 8% and above in manufacturing sector export earnings in the year 2004. The sub-sectors were further identified based on their potential to improve their performance within the EAC regional integration area (KAM, 2010). The 5 sub-sectors identified were: - Food, Beverages and Tobacco; Metal and Allied; Building, Construction and Mining; Chemical and Allied; and Leather Products and Footwear. The sample for the study was identified by use of Simple Random Sampling technique.

A sample size of 138 was arrived at based on sample size determination formula. Structured questionnaires were used as data collection instrument, as a result of which 180 questionnaires were sent out to respondents, out of which 150 respondents responded to the questionnaires.

Research Findings and Discussions

Empirical Research Findings on the adoption level of SL

The table 1 and 2 below is a presentation of the findings on the level of adoption of SL.

Insert table (1) about here

From table 1 above, 66.34% of the respondents had adopted strategic levers usually or to the maximum level, while 18.38% had never or rarely had adopted strategic levers, with 15.32% having adopted strategic levers sometimes. The adoption level of strategic levers among manufacturing firms in Kenya therefore, stood at 66.34%.

Insert table (2) about here

The findings in table 2 above revealed that, Kenya's manufacturing firms which operate under the EAC regional integration trade (RI=Yes), perceived adoption of Product Quality as the most influential strategy among the SL strategies with a Mean level of 4.56 and Standard Deviation of 0.878, while they perceived Rationalization as of minimal influence with Mean level of 2.93 and Standard Deviation of 1.28. It was also noted that manufacturing firms which were not involved (not integrated) in EAC regional integration trade (RI=No) perceived adoption of Product Quality as the most influential strategy among the SL strategies, with a Mean level of 4.09 and Standard Deviation of 1.314, they also perceived Rationalization as of minimal influence with Mean level of 2.69 and Standard Deviation of 1.388.

From the total respondents, 108 were integrated (RI=Yes), while 35 were not integrated (RI=No). In both instances, the findings revealed unanimity in the identification of product quality as the most influential of strategic levers strategies, while the least influential strategy under strategic levers was rationalization.

Empirical Research Findings on the East African Community regional integration as a moderator of SL on performance of Kenya's manufacturing firms

Through use of Spearman's rank correlation coefficient, the significance of the East African Community regional integration as a moderator of SL on performance of Kenya's manufacturing firms for the manufacturing firms was determined and yielded the results presented in table 3 below.

Insert table (3) about here

The findings in table 3 above reveals that, East African Community (EAC) regional integration has a greater moderating influence on manufacturing firms which are integrated (RI=Yes) than manufacturing firms which are not integrated (RI=No). The significance of EAC for the integrated manufacturing firms (RI=Yes) are 0.347, 0.249 and 0.055 for Sales (Y_s), Profit (Y_p), and Employment (Y_e) respectively, while the significance of EAC for the non integrated manufacturing firms (RI=No) are 0.329, 0.22 and 0.209 for Sales (Y_s), Profit (Y_p), and Employment (Y_e) respectively.

Empirical Research Findings on the influence of SL on performance of Kenya's manufacturing firms under EAC

The performance of manufacturing firms was measured in terms of Sales, Profits and Employment, which were denoted by Y_s , Y_p and Y_e respectively to determine the influence of SL on performance of Kenya's manufacturing firms under EAC regional integration as presented under table 4 below.

Insert table (4) about here

From findings on table 4 above, it is noted that there is a linear relationship in terms of strategic levers and performance of Kenya's manufacturing firms operating under the East African Community regional integration as depicted by the following results when measured in terms of Sales, Profits and Employment as follows:- Sales (Y_s) findings are ($r=0.268$, $p\text{-value}=0.001$); Profits (Y_p)($r=0.111$, $p\text{-value}=0.201$); Employment(Y_e) ($r=0.144$, $p\text{-value}=0.095$), hence, the study findings revealed that there is a strong correlation between performance of Kenya's manufacturing firms which are integrated in terms of Sales at 0.01 level of significance as compared to profits and employment.

Conclusion

The conclusions are derived from the study findings in relation to the objectives of the study as below:-

Level of adoption of Strategic Levers (SL)

From the study findings, it was deduced that there was a high level of adoption of Strategic Levers (SL) among Kenya's manufacturing firms operating under the East African Community (EAC) regional integration at 66.34%.

Among the different strategies comprising of strategic levers, Product Quality was the highest perceived strategy adopted by Kenya's manufacturing firms operating under the EAC regional integration (RI=Yes) and those which are not integrated under the EAC regional integration (RI=No) at a mean of 4.56 for (RI=Yes) and 4.09 for (RI=No) respectively. A majority of the integrated had a strong perception than the not integrated.

Significance of EAC regional integration

The East African Community regional integration was found to have a significance influence on the performance of Kenya's manufacturing firms. Performance of the regionally integrated manufacturing firms (RI=Yes) are significantly influenced by the EAC in terms of Sales (Y_s) than the other measures of performance such as Profits(Y_p) and Employment(Y_e). Manufacturing firms in Kenya intent on enhancing their performance need to explore expanding their operations to the EAC regional integration area for increased sales, profits and employment respectively.

Significance of adoption of Strategic Levers on firm Performance

The significance of strategic levers in influencing performance of Kenya's manufacturing firms under EAC regional integration is very strong in terms of Sales (Y_s). The other measures of performance such as Profit (Y_p) and Employment (Y_e) are less influenced by strategic levers. It is important therefore, that manufacturing firms in Kenya intent on enhancing their performance while operating under the EAC regional integration need to adopt strategic levers for increased Sales, improved Profits and Employment creation. This would enable them make substantial contribution to the socio-economic development of Kenya and the entire East African Community regional integration area.

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Table 1. Adoption level of Strategic Levers by Manufacturing firms in Kenya

	Never or Rarely		Sometimes		Usually or to the maximum level		Total No	Total %
	No	%	No	%	No	%		
Rationalization	58	39.2	42	28.4	48	32.4	148	100
Technology acquisition	14	9.6	24	16.3	109	74.1	147	100
Automation of production	19	12.9	27	18.2	102	69	148	100
Product quality	14	9.5	5	3.4	129	87.2	148	100
Regionalization	30	20.7	15	10.3	100	69	145	100
Total	135	91.9	113	76.6	488	331.7	736	500
100%		18.38		15.32		66.34		100

Source: survey data

Table 2. Adoption level of Strategic Levers by Manufacturing Firms where RI=Yes and RI=No

	N	Min	Max	Mean	Std.	N	Min	Max	Mean	Std.
					Deviation					Deviation
Rationalization	108	1	5	2.93	1.28	35	1	5	2.69	1.388
Technology acquisition	108	1	5	4.08	0.972	35	1	5	3.74	1.094
Automation of production	108	1	5	4.03	1.089	35	1	5	3.4	1.355
Product quality	108	1	5	4.56	0.878	35	1	5	4.09	1.314
Regionalization	108	1	5	4.12	1.211	35	1	5	3.03	1.723
	a. RI = Yes					a. RI = No				

Source: survey data

Table 3. Significance of EAC as a moderator of SL on firm performance

Regional Integration				SL
No	Spearman's rho	Y_e	Correlation Coefficient	0.209
			Sig. (2-tailed)	0.25
		Y_p	Correlation Coefficient	0.22
			Sig. (2-tailed)	0.243
		Y_s	Correlation Coefficient	0.329
			Sig. (2-tailed)	0.057
Yes	Spearman's rho	Y_e	Correlation Coefficient	0.055
			Sig. (2-tailed)	0.588
		Y_p	Correlation Coefficient	.249*
			Sig. (2-tailed)	0.012
		Y_s	Correlation Coefficient	.347**
			Sig. (2-tailed)	0

** . Correlation is significant at the 0.01 level (2-tailed). Performance Measurement. Y_e = Employment; Y_p =Profit; Y_s =Sales

*. Correlation is significant at the 0.05 level (2-tailed).

Source: survey data

Table 4. Influence of Strategic Levers on Performance of Manufacturing Firms

			SL
Spearman's rho	(Y_e)	Correlation Coefficient	0.144
		Sig. (2-tailed)	0.095
Yes	(Y_p)	Correlation Coefficient	0.111
		Sig. (2-tailed)	0.201
	(Y_s)	Correlation Coefficient	.268**
		Sig. (2-tailed)	0.001

** . Correlation is significant at the 0.01 level (2-tailed). Performance Measurement. Y_e = Employment; Y_p =Profit; Y_s =Sales

*. Correlation is significant at the 0.05 level (2-tailed).

Source: Survey Data