

Impact of Quality Control on Organizational Performance in Nigeria: Case Study of Selected SMEs in Ilorin Metropolis

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Abstract

Organizations that want to exist in the current global market must put in place quality control processes that will guaranty improved and multi-functional products. This paper therefore examined the impact of quality control on the performances of Small and medium enterprises outputs. A detailed questionnaire was mailed to operators of SMEs in the manufacturing sector. 104 of the respondents correctly filled and returned their questionnaires representing a response rate of 82 per cent. The paper observed that expenditure on quality control on the average will lead to about 76 per cent rise in the profitability level of SMEs. This was as a result of the decline in wastages, less frictions and greater output that can compete favourably in the international market. The study therefore concluded that all efforts including the strengthening of government agencies should be put in place to guaranty products of high quality form the SMEs.

Keywords: Asian tigers, Global, Control, Entrepreneurs

Introduction

The current trend in the global market where the borders of countries of the world have merely been reduced to buttons calls for serious attentions. Products or services from any part of the world are made available to all parts almost instantly due to the globalization era that we now find ourselves.

Organization whether small or large now need to achieve greater performance and improved output through the production of goods and services that satisfy their consumers' needs. The provision of these needs will guaranty the continued survival of the organization. Markets were traditionally segmented into two. Large markets competed in the international market while smaller ones operate in the local or regional markets. The drivers of globalization are removing the barriers (Etenad, 2004). Hence, organizations that can meet up with these dynamic consumer needs are the ones that can compete favourably in the global market.

Quality control is central to the achievement of consumers needs since all organizations around the globe now compete together in the same market. According to Martinez-costa et al (2008), Quality control assists companies to gain competitive advantage. This is achievable by out playing competitors' in terms of product quality at competitive prices. These have made organizations to move towards the adoption of policies and measures that will make them to continue to compete progressively in the emerging global market.

The pressure from globalization has made organizations to move towards three major competitive arenas. These are in the area of quality, cost and responsiveness (Ahmed, S. and Hassan M. (2003). Most organizations have continued to find it difficult to achieve these herculean tasks altogether. This is because as they manage to cut an edge in one aspect they are found lacking in achieving others. It is almost impossible for organizations particularly in developing economies of the world like Nigeria to meet up with the expectations.

While trying to meet up with these challenges, it is suicidal to fold their hands and allow foreign companies to dominate the markets with their goods. This will definitely lead to dumping of foreign goods as well as unemployment of able bodied men in the importing countries. Scholars among whom are Hill (2004), Heizer and Barry (2004) and Gasperz(2005), all agreed to the fact that the place of quality control cannot be underestimated for an organization that truly wants to survive. The current situation in the economic environment where we find ourselves therefore desires our attention. To what extent have SMEs in Nigeria adopted the quality control process to be able to compete in the global market and bring in huge Profit to the

entrepreneurs?. This paper therefore seeks to examine the impact of quality control activities on SMEs output in Nigeria.

Literature Review

The concept of quality control was first introduced into the manufacturing industries in Japan after the Second World War. Other countries of the World such as the United States of America (USA) and United Kingdom (UK) later adopted the concept to their own organizations. Japan as at the 1950 does have tenaciously developed their manufacturing industries towards the achievement of high quality outputs at lower costs. This is made possible due to the holistic approach to production activities. According to Kumar (2006), quality control entails the improvement plans in the areas of management commitment, strategic approach to quality system, quality measurement, process improvement, education and training and the elimination of impediments. These are expected to produce a better output that can meet both the local and international standards at lesser cost.

Feigenbaum (1991) was of the view that quality control is a business method that entails three layers. These are Quality leadership, modern quality technology; and organizational commitment. He was of the view that to have an effective and efficient quality control system, there must be coordination among these quality control layers. To achieve the feat therefore, there are some critical players in the system; these are the work force, machines and information. The coordination of these tasks is essential for the system. According to Ishikawa as cited in Ali and Abdulrahman (2012), he Introduced the Company Wide Quality Control (CWQC) dimension. To him, quality control means "developing, designing producing, marketing and services with optimum cost-effectiveness and usefulness, which makes customers to purchase with satisfaction. The definition embraces all the critical segments from production to sales of organizational outputs.

Another renowned scholar on quality control, Deming (2011) was of the view that quality control is a complete philosophy of management that can be applied to small or large organizations whether in the public or private sectors of the economy.

Theoretical Framework

There are many theories/models of quality control. The leading ones are; lead production model (Toyota production system), six sigma model,

Japanese total quality control model (Feigenbaum Model), Quality award models as well as the Deming quality model. It needs to be noted that all these models are premised on three approaches. These are contributions from quality leaders, formal evaluation and the measurement studies.

The Deming quality model is adopted by this study due to its completeness and its applicability to small and large Organizations in both the Public and Private Sectors of developed or developing economies of the world. The Deming Model assists managers of small businesses to cope with challenges of improving performance, productivity, profitability as well as maintaining competitive advantages in the dynamic global market. The model consists of 14 principles which can be adopted by all organizations. These principles include; constancy of purpose, adoption of new inventions and philosophy, reduction on dependence on inspection to achieve quality output, discourage the award of business on price gag alone, improve the system of production and services, manpower training and development, institution of leadership culture, drive out fear of competition and dominance, break down of barriers among departments to achieve efficiency, eliminate unnecessary targets, slogans and exhortations, quality to be encouraged rather than number of outputs, removal of barriers that deny people pride of workmanship, institution of educational programs for self improvement and the coordination of workers effort to achieve the transformation objectives of the organization.

Importance and Growth of SMEs in Nigeria

There is no gain saying that Quality Control is essential and important to all kinds of organizations. However, studies on quality control of SMEs across the world have been limited (Parkin and Parkin 1996; Walley 2000). SMEs across the globe have been known to be the engine of growth and development. The Asian Tiger have over the years identified the spectacular contribution of SMEs to their economy and have developed the sector significantly Kadiri, (2013).

SMEs are capable of generating employment to the teeming population of Nigerians. It is worthy of note that most of the insecurity situation currently confronting the nation have all been traced to the alarming rate of unemployment. According to Mamalahi (1991), the 1970 – 1985 state led import substituting industrialization (ISI) strategy, indigenization programme and the resultant economic liberalization policies which replaced the ISI after

1986 in Nigeria have not propelled the economy towards the intended direction. The SMEs in Nigeria have propelled the economy second to none in the country. According to Elebeke (2015); the 2012 Enterprise Baseline Survey revealed that there are 17 million Small and Medium Scale Enterprises in Nigeria, employing 32.41 million persons and makes a contribution of about 46.54 per cent to the nation's Gross Domestic Product in nominal terms.

SMEs development no doubt can bring the required growth and development that Nigeria needed (Kadiri, 2013). However, SMEs in Nigeria die as soon as they are created. This largely has been attributed to the low quality in output which cannot compete in the global market.

The continued opening of the world market has made SMEs to respond to their customers needs by improving on their production process and their output. More so, the establishment of government agencies such as; National Agency for Food and Administration and Control (NAFDAC) and international Standard Organization (ISO) have contributed immensely to the quality improvement of SMEs output in the country. Drugs as well as other products produced in Nigeria can now compete favourably in the world market.

Methodology

This study used the primary method of data collection to obtain information pertaining to quality control among selected SMEs in Ilorin metropolis, Kwara State. Our choice of Ilorin was as a result of the growth of SMEs in almost all parts of the metropolis. More so, Ilorin is centrally located in the country. A total of 253 SMEs were duly registered and in full operation in the study area.

Different statistical techniques were used to select our sample size. This was used so as to have a fair representation of all categories of SMEs operating in the area. Towards this end, detailed questionnaire were administered on the respondents. A sample size of 127 SMEs representing 50 percent of the total population was selected. The respondents correctly filled and returned 104 questionnaires representing a response rate of about 82 per cent. Simple regression technique was however used to analyze the data obtained.

Model specification

$$P = \beta_0 + \beta_1 Q_c + U$$

Where Q = quality Control
 β_0 = Intercept of the model
 β_1 = Coefficient
 P = Profitability
 U = Standard error term

Our aprior expectation was that quality control will have a negative effect on the profitability of the SMEs. This is because quality control entails financial commitment on the part of the business owner which will have an impact on profit. It will have an impact because the expenditure on quality control processes will form part of the operating expenses which is expected to be deducted from total revenue to arrive at profit.

Test of Hypothesis

Table 1: SMEs categorization.

SME Characteristics	Frequency	Percentage
Agro Allied	39	37.5
Non Agro Allied	65	62.5
Total	104	100

Source: Authors Computation (2015).

A total of 104 respondents correctly filled and returned their questionnaire. A total of 39 of these respondents representing 37.5 percent were into Agro Allied businesses while 65 respondents representing 62.5 per cent are into non Agro allied business. This is so because the SMEs in the latter sector are predominantly in the manufacturing or service sector. They have more formal system of operation.

Table 2: Quality control helps to reduce wastages and low outputs.

Responses	Frequency	Percentage
Strongly Agree	37	35.6
Agree	56	53.8
Undecided	6	5.8
Disagree	4	3.8
Strongly Disagree	1	1.0
Total	104	100

Source: Authors Computation (2015).

The table above indicates that 37 (35.6%) of the respondents strongly agree that quality control process will help to reduce wastages, eliminates frictions thereby resulting into decrease in production cost and an increase in profitability. A total of 56 (53.8%) of the respondents agreed while 6 (5.8%) were undecided of all the respondents, 4 (3.8%) Disagree to posit that quality control help to reduce wastages. Only 1 (1%) of the respondents seriously disagree to the notion that quality control helps to reduce wastages and product output.

Presentation of Result

$$R_c = \beta_0 + \beta_1 Q_c + U$$

$$P = 68.0214 + 0.5781 R_c$$

$$se = (40.6194) \quad (0.0815)$$

$$t = (1.4721) (6.4793)$$

$$t^2 = 0.7641$$

Our Aprior expectation was that there exist a negative relationship between quality control process and profitability of SMEs. This is premised on the believe that SMEs expend huge amount of money on quality control.

The outcome of the result however differs from this expectation. If the expenditure on quality control went up by naira, on average, profitability level of SMEs will increased by about 58. This is so because the more the quality of output produced, the more appealing the product becomes to the customers thereby increasing their commitment as well as patronage. Moreso, our R^2 value of about 0.76 means that 76 percent of increase in profit level is explained by quality control expenditure while other factors contribute 24 per cent. This explains that an increase in the expenditure of SMEs on quality control process will result into about 76 percent rise in the profitability level. This is because the output will be able to compete better in the market, reduction in wastages, fewer frictions and lead times and greater out puts.

Conclusion and Policy Recommendations

The current trends in the global market calls for a more pragmatic approach by SMEs to enable it compete in the ever dynamic market particularly now that the price of oil has depreciated in the global market. The life span of products has continued to decline due to the openness in world trade. New

products are launched even before the earlier produced ones are launched in the market. Hence, organizations must meet the expectations of their consumers. SMEs are however not left out. The paper observed that any organization that wants to survive must participate proactively in the competing world. The institution of a quality control process the study observed is desirable. The outcome of the data collected and analysed showed that a unit increase in quality control process expenditure will give an outstanding and significant increase in the profitability level of the SMEs.

The paper therefore recommends as follows:

- (i) Manufacturing outfits or service providers should as a matter of urgency produce products that will meet the tastes and expectations of its consumers. Since the world is now a global market. This is achievable by expanding their focus in their business line.
- (ii) SMEs should put in place quality control processes which is expected to go a long way in reducing wastages standards set up by the government agencies or other stake holders must be adhered to strictly.
- (iii) Employees are central in the realization of organizational objectives. Quality control cannot be possible without adequate financial and non financial rewards to the employees. This is achievable through period increase in workers salaries, promotion as well as recognition whenever there is an increase in the profitability level of the organization.
- (iv) Organizations should carry out periodic internal examination of their products to ensure that at all times it meets up with customers' needs and expectations.
- (v) Manpower training and development is also a crucial factor in improving outputs. New production techniques should be put in place and where possible improved upon from time to time to ensure stable quality of output and optimum result.

The paper therefore concludes that there are no two ways about it. Organizations that want to exist in this dynamic as well as continued decline in product life cycle must as a matter of urgency adopt in its totality a potent quality control processes.

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