
A REVIEW OF QUALITY PRACTICES IN A WORLD-CLASS ENTERPRISE

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ABSTRACT

Enterprises in the business world today are faced with enormous competition from both their immediate and far environments. The whole world is shrinking into a village, which makes it possible for companies to sell their products and services to customers of different race, colour, background and status. Therefore, this paper aim to assess how companies grow into a world class one with their practices that distinguish them from their competitors. Manufacturing and service companies have ways of making themselves distinct by offering their customers satisfying products and services and this in turn, qualifies them for great financial reward and an image that transcends the homeland of these companies. Thus, ,assessing how they do that, via the motivating support of a National Body that spurs them into action, and how Nigerian firms can learn from this formed the bedrock of this paper.

Keywords: Globalization; conformance; *circular market, reliability; customer satisfaction*

INTRODUCTION

Total quality management is considered as a management approach that was first used during the 1950's and has become popular during the early of 1980's. Total quality is considered as a total description of the culture, attitude as well as the organization of the company that is in focus of providing their customers with their products or services that will meet the demands and preferences of their customers. Furthermore, the culture requires quality in all aspects of the company's operations, with the different processes that are being done right the first time and defects as well as the waste eradicated from the different operations (Hashmi 2008). TQM is a method that is used where in the management as well as the employees are all involved in their continuous improvement of the production of goods as well as services. It can also be considered as the combination of quality as well as the different management tools that focus at the increasing the growth of the business as well as reducing the losses that was caused by different unimportant or useless practices (Hashmi 2008).

Motorola is only one of many companies that apply the principle of TQM in their organizational culture. Motorola Inc focuses on their sales victory in the global market in the industry of electronic components as well as equipment. The company is doing it by improving the quality of their products by improving their productivity and overall performance (Baldrige National Quality Program 2002). During 1981, the company had launched their ambitious project that drives for a tenfold of improvement in the quality of their products as well as their services. The said project had been successful; the evidence is that most of the products of the company are considered as number one or the best in their class. The company is still striving for the best and looking forward to target their goal of

Zero defects in everything we do (Baldrige National Quality Program 2002). With accordance to the said project, the managers of the said company are also literally carrying the corporate objective of the company and that is the total customer satisfaction. They are wearing a pocket that has a printed card that states the said objective. Furthermore, those upper management officials are also open in serving their customers by wearing pagers in order for them to be available to their customers. Furthermore, they are also visiting the different businesses of their customers in order to conduct a survey that will let the company know about their customers' likes as well as dislikes towards their products (Baldrige National Quality Program 2002).

Above all, the company is also implementing a system that handles the information and data that have been gathered using the all-embracing network of the customer surveys, complaint hotlines, filed audits as well as other significant measures about the feedback of the customers, together with the guidelines in planning for the quality improvement and development of the product (Baldrige National Quality Program 2002). American, Asian and European companies are constantly striving for a foothold in the global market in virtually all kinds of products and services. They do not see themselves as enterprises that have arrived but rather strive harder for acceptance in the global market place. They do this through building their products and services around their customers. Not only do they make available to their customers in their local markets good products, but they ensure that these products satisfy their customers or even delight them. Thus the specific objectives of this study are:

1. To examine the role of Quality Awards Body in motivating enterprises to world-class level.
2. To explain the effect of quality products on the attitude of customers toward an enterprise aspiring to be world-class.

METHODOLOGY

The procedure for this work is that enterprises making waves in the world scene are mostly of U.S. origin. This stems from U.S. dominant status in virtually everything in the world, politically, economically and technologically. Even if such firm(s) does not have U.S. origin, it sure would have one or two links there. The justification for the choice of case study can be seen from the brief historical background of the prospect of Motorola below. The top three quality prizes are the Deming Prize, the Baldrige Award and the European Quality Awards. Union of Japanese Scientists and Engineers have annually awarded the Deming Prize since 1951. For three decades it was the quality award and is still the most prestigious award. The Deming Prize is given to a person or group of people who have advanced the practice and furthered awareness of TQC. The Deming Application Prize goes only to companies based on successes attributable to implementing TQC. The second major quality prizes was established by Congress in 1987 (Public Law 100-107) and is called the Baldrige Award. The award set a national standard for quality and companies use the criteria as a management guide. Applicants must address seven specific categories: leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management, and business results. Winners are required to share their successful strategies. U.S.

Department of Commerce's National Institute of Standards and Technology administer the Malcolm Baldrige National Quality Award. The third award is the awarded by The Foundation for Quality Management with support from the European Organization for Quality and the European Commission. It is called the European Quality Award and was first awarded in 1992.

The U.S. was slow to see the advantages of TQM, although the American Society for Quality Control (now known as American Society for Quality) was formed in 1946. Huge markets for American-made products after World War II kept American industries producing products with little change in manufacturing methods. It wasn't until the late 1970s that U.S. manufacturing came up against foreign competition and the trade deficit, and at that time it became obvious that Japanese companies were far ahead of U.S. companies in quality. One of the first companies in the U.S. to grasp and utilize TQM was Motorola. In 1981 Bob Galvin, Motorola's chairman, called for an across-the-board improvement of 10:1 in five years. To accomplish this they needed a breakthrough technique. This breakthrough is detailed in the Six Sigma process:

- Faith that the improvement target could be achieved.
- Total customer satisfaction.
- Powerful new tools, especially design of experiments.
- Cycle-time reduction.
- Designing for ease of manufacturing.
- Manufacturing innovations.
- True partnerships with key suppliers.
- Training for all employees.

Within five years Motorola had achieved their goal. In 1988 they were awarded the Malcolm Baldrige National Quality Award for their impressive Six Sigma process. Keki R. Bhote nurtured the Six Sigma project for eleven years at Motorola and then went on to consult with other companies. In the early 1980s when Donald Petersen was CEO of Ford, Ford executives were investigating the secret of the Japanese success. They discovered W. Edwards Deming's holistic blend of statistics and management. Deming's ideas came to Detroit. Ford was in serious trouble because of Japanese competition. Deming introduced the statistical methods needed to improve processes. These are the foundation of what became known as Six Sigma, a statistical measure that refers to 3.4 defects per million. Besides this scientific method of improving quality, Deming emphasized that all employees needed to work toward quality. He advocated teamwork and cross-department collaboration, close work with suppliers and employee training. Other companies that adopted the Deming quality methods were General Motors, Florida Power & Light, and Procter and Gamble.

LITERATURE REVIEW

Hansen and Ghare (1987) defined quality as a concept that has so many connotations especially when used by many people but that the word has a central theme which to them, is the ability of a product to satisfy the needs of the end-users i.e. customers. Quality, to these authors, is an attribute given a product by the customers, which means for an

enterprise to be reckoned with in terms of its product(s) the enterprise has to really understand its numerous customers at least to a level of satisfying their basic expectations from a product. Hansen and Ghare (1987) went ahead and said that delivering quality products by an enterprise can only be possible after several intermediate steps are taken; the needs of the consumers translated to an engineering design; the production department actually producing the product; then a feedback from the customer which will tell whether they are satisfied or not.

Quality of Design Is a side, which they argued concerns the stringency of the specializations for manufacture of the product. **Quality of Conformance** Is concerned with how well the manufactured product conforms to the original design requirements- that is, generally speaking, how well quality is controlled from materials procurement through shipment and storage of finished goods. And the third is, **Quality of Performance**, depends on how the other two sides are. If they are rightly done, then, when the product is put to test, it performs to the optimum level.

Kotler (2003) argued that through Total Quality Management companies can create an acceptable standard of products for their selves that will enable them challenge their competitors on their own shores. He argued further that companies cannot simply stay domestic and expect to maintain their markets. Despite the many challenges in the international area (shifting borders, unstable governments, foreign exchange problems, corruption, and technological pirating), companies selling in global industries need to internationalize their operations. The researcher's view is that a Good Manufacturing Practices (GMP) as guaranteed by Total Quality Management (TQM) will propel enterprises in any part of the world to become a world-class enterprise. Since quality, it makes such enterprise acceptable anywhere and since countries differs in terms of currency; the enterprise will be able to use Price discrimination in pricing its product. This will ensure commensurate amount of money paid for the products, which is congruent to the value for money syndrome in customers.

Levitt (1983) in his article 'the globalization of markets' opined that enterprises anywhere in the world stand to gain tremendously by going global. This statement was intellectually supported by this professor saying that the work! is becoming a common market place in which people, no matter where they live, desire the same products and lifestyles'. The development of the World Wide Web, the rapid spread of cable and satellite TV around the world, and the global linking of telecommunications networks have led to a convergence of lifestyles which makes it possible and easier for enterprises to become world-class. These global marketers achieve economies through standardization of production, distribution, marketing and management. Coca-cola, McDonald's, Marlboro, Nike, the NBA and Gillette are among the companies that have successfully marketed global products. They translate their efficiency into greater value for consumers by offering high quality and more reliable products. Levitt favours global corporations that try to sell the same product the same way to

all consumers. They focus on similarities across world markets and "sensibly-force suitable standardized products and services on the entire globe."

Malcolm Baldrige Award

In 1987, the U.S. congress established The Malcolm Baldrige Quality Award to promote better quality management practice and improved quality results by American Industries. The bid of the U.S. government in spinning-out the best in American industries led to the establishment of this award named after the then secretary of commerce. This award recognizes any enterprises that have mounted outstanding world-class quality efforts. It promotes national awareness of the importance of improving the quality of products and services as well as recognizes quality achievement. U.S companies in each of three categories: manufacturing, service and small business. The purpose of the U.S. government in establishing this Award has more than being accomplished because the enterprises that would have' sat down and licked their laurels are continually improving their processes and products thereby making them transcend their national boundaries. This sort of Award, as we also have Deming price in Japan, is needed if Nigerian enterprises are ready to go places. It makes the enterprises more aggressive and intelligent in their approach thereby improving their market position on the globe. Walkin (1992) argued that enterprises that want to go places-World-class, must imbue in its culture a high sense of quality. Quoting from their write-up, they wrote that

'customers have at least one thing in common-they expect to get value for money. They will judge a supplier on the quality of service received and the extent to which their requirements are consistently met...'

They opined that the mission statements of organizations or enterprises should announce the quality practices that they are out for and actually find means of delivering such. Walkin (1992) argued further that quality culture will fulfill the most grandiose objective of enterprises wanting to go global. In order to fulfill profitably their business objectives, many enlightened organizations are urgently promoting strategies that will result in a more responsive and effective service to customers. The need to maintain a competitive edge over other providers and to assure consistent quality of provision is reinforced by the requirements to survive i.e. enterprises that do not see the global market as their target may soon be shown the way out of business. Competitors from far and near, with more quality and probably cheaper products will in no time take over the market. It is when enterprises see themselves as part of the global players' that they go for corporate inspiration and continuous quality of development that has provide to be so rewarding to world-class businesses following the American and Japanese traditions (Walkin 1992). Schroeder (2000) introduced continuous improvement in the quality of products as a means of establishing for themselves an image that is acceptable anywhere in the world. He argued that continues improvement is a never-ending process and is driven by knowledge and problem solving. As producers gain a better understanding of customer expectations, and as better technology become available, quality can be continuously improved.

He added the dimensions of availability, reliability, maintainability, and field service to quality of products. Availability to Schroeder means that a product is available if it is in an operational state and not down for repairs or maintenance. Reliability refers to the length of time that a product can be used before it fails. Maintainability has to do with the restoration of a product or service once it has failed. And field service, the last dimension of quality represents warranty and repair or replacement of the product after it has been sold. For enterprises that are aspiring to be world-class, there is no substitute for all these dimensions of quality particularly the dimension of field service. They should be ready to serve their customers to satisfaction anywhere they are located on the globe. An example of such world-class enterprise that delivers such excellent service is CATERPILLAR, a earth-moving manufactures in the U.S. that promises replacement of any part of its machines within 24 hours of equipment breakdown. This is truly a world- class enterprise. Kolter (2003) defined a global firm as one that operates in more than one country and captures R & D, production, logistical, marketing, and financial advantages in its costs and reputation that are not available to purely domestic competitors. To him, global firms plan, operate and coordinate their activities on a worldwide basis.

Enterprises, whether in the developed or developing world, can no longer rely solely on their local markets for wealth creation as competition mounts up to the highest level everyday. A Nigerian brewer will have to battle with other brewers in the world in terms of quality even with restrictions on the products of foreign enterprises. Therefore, whether a firm realizes it or not (i.e. ferocious competition on a world-wide basis) is not the question but their readiness to take the bull by the horn and see the world as a market that can be explored for wealth. Local businesses, with their little resources, can go places if they are ready to improve on their processes and products and offer products that will be difficult to fault in any quarter of the world. A national body seeing to the practices of enterprises (as we have in Baldrige and Deming Award) is not an optional issue if local enterprises must rise to world-class level because this will encourage healthy rivalry among the enterprises and by so doing, continuous improvement on their products will definitely thrust them into that category of firms. Corporations worldwide are achieving great feat financially and technologically which enables them to leap in a quantum way, to any part of the world and continue their ever improving, operations. They are shakers and movers of the world either in manufacturing or service industry. They seem to have secret(s) that is not known to their counterparts in this developing nation and as such the objectives of this paper are geared at unraveling the success path that these enterprises, with their world-class image, are treading and encourage their counterparts in this part of the world (Africa) to not only follow suit but overtake them.

Table 1: Malcom Baldrige National Quality Award Criteria

1.	Leadership		110
1.1	Leadership system	80	
1.2	Company responsibility and citizenship	30	
2.	Strategic Planning		80

2.1	Strategy development process	40	
2.2	Company strategy	40	
3.	Customer and market focus		80
3.1	Customer and market knowledge	40	
3.1	Customer satisfaction and relationship enhancement	40	
4.	Information and Analysis		80
4.1	Selection and use of information and data	25	
4.2	Selection and use of comparative information and	15	
4.3	data Analysis and review of company performance	40	
5.	Human Resource Focus		100
5.1	Work system	40	
5.2	Employee education, training and development	30	
5.3	Employee well-being and satisfaction	30	
6.	Process Management		100
6.1	Management of product and services processes	60	
6.2	Management of support processes	20	
6.3	Management of supplier and partnering process	20	
7.	Business Results		550
7.1	Customer satisfaction results	125	
7.2	Financial and market results	125	
7.3	Human resources results	50	
7.4	Supplier and partner results	25	
7.5	Company-specific results	125	
	Total points		1000

Source: "1998 criteria for performance excellence: Malcolm Baldrige National Quality Award", U.S. Department of Commerce, National Institute of Standards and Technology, Gaithersburg, MD 1998. These seven categories represent a comprehensive framework for quality management and companies applying for the award are free to make their own flexible technique of measuring quality practices provided they are in line with Baldrige's

INSIDE MOTOROLA INCORPORATION

Motorola Incorporation is the electronic manufacturing business with more than 140,000 employees in 53 countries. This corporation does not see itself serving the American market alone but rather defines its purpose as "to honourably serve the needs of the community by providing products and services of superior quality at a fair price to our customers; to do this so as to earn an adequate profit which is required for the total enterprise to grow ...". Motorola, with George Fisher as president and CEO, recognizes the importance customer satisfaction plays in becoming a world-class company. World-class companies are able to compete and win no matter who they are up against as a competitor. These world-class competitors increasingly are organizing their business around their customers.

Gallear and Ghobadian (2004) of Institute of Industrial Engineers Incorporation argued that these world-class companies did not just simply believe "the customer is always right". They believe the customer is the right way to organize their work. For instance, Motorola's concept of total customer satisfaction is based on a clear strategy aimed at pleasing the customer, comparing themselves to their competition, and then making whatever changes are necessary to be the best-in-class. Motorola started its quality journey in 1979 with the entire globe as its market pace. The Iridium fiasco is truly a sign that Motorola is a world-class corporation because, if that was not true, how could it have recovered from such a colossal loss. It tried to introduce a communication network that would be useable anywhere in the world. Though it failed, the attempt shows an enterprise that is really global in its thinking. Prior to 1987, Motorola was using statistical control to inspect its products quality, which wasn't really paying off. In 1987 it adopted a quality practice called six-sigma quality. This practice is known and used virtually in all leading manufacturing and service industries worldwide. Motorola has since trademarked it.

SIX SIGMA QUALITY: THE SECRET

Bill Wigenhorn, Vice president and director of Motorola's training and education noted the philosophy behind Six Sigma. He said that it is "to get the process right first time ... but only do it if it is a value added step." Six Sigma is a long-term forward-thinking initiative designed to fundamentally change the way corporations do business. It is first and foremost a business process that enables companies to increase profits dramatically by streamlining operations, improving quality, and eliminating defects or mistakes in everything company does (Bou and Beltran, 2005). While traditional quality programs focused on detecting and correcting defects, Six Sigma encompasses something broader. It provides specific methods to re-create the process itself so that defects are never produced in the first place.

The Six Sigma objective is to achieve a 10-fold increase in quality by 1989 and 100-fold increase in quality by 1991. In 1992, Motorola hoped to achieve Six Sigma capability (e.g. zero defects on all important parameters). And they did achieve that goal. George Fisher explained the process of Six Sigma quality that translated the enterprise to a world-class one. He said each person and each department, after being educated on the importance of their commitment to customer satisfaction through quality, must first identify the produces or service they provide. This represents the first step out of the six steps. The next is for each employee to ask himself "for whom do I work? The answer to this question is gotten from the customer, who is being asked, "what do you need form us?" and "why do you need it?" it may be obvious what the customers want at times and at another time it may not. Regardless of the difficult, it is critical to form a clear and accurate view of each consumer's mission. Next is a need to identify what you need in order to satisfy the customer. The question - "what do I need to do my work better (in customer's eye)? Once these needs are identified you then sit down with your supplier and determine what you need to do your work. The fourth step is to define the process for doing your work. Bach must ask, "How can I specifically define my work: This means identifying the detailed inputs and outputs for each step. This leads to a flow-chart that simplifies the procedures.

The fifth step is the design process. The objective is to make tasks as mistake proof as possible and eliminate wasted efforts. The central question to ask is, "how can I do work better?" it might include simplifying tasks, increasing training or changing methodology. The sixth and final step in this process is to ensure continuous improvement by measuring, analyzing and controlling improvement process. The Six Sigma principle has two basic sub-methodology for measuring results: DMAIC (define, measure, analyze, improve, control), used when existing processes have fallen below acceptable levels and incremental improvement is desired; and DMADV (define, measure, analyze, design and verify), used when new processes or dramatic improvement in existing processes are desired. Becoming a world-class competitor able to compete with the Japanese or the Americans or anyone else means organizing operations around the customer. The strategy involves identifying how you can please your customers once their needs are identified, then determine how your company stacks up against the competition. Find who affect the heist in class and then compare your business to theirs. Motorola has saved nine billion dollars (\$9b) due to Six Sigma program. This represents what can be done when enterprises begin to take up challenge in reducing their cost of operation by offering quality products at the first time.

Motorola provides a shining example of what can be done, and how to focus on total customer satisfaction, which ultimately creates world-class image. Their customer-oriented strategy consists of having everyone in the organization focus on service and then applies a systematic approach to continuously improve the offerings of the company. Always benchmarking the process, and then finding ways of improving customer-focused efforts as Motorola does, is at the heart of improving quality, which qualifies any enterprise for a worldwide acceptance. To conclude this section, sometimes in May 2005, Motorola signed an agreement of setting up a manufacturing cell in Nigeria to confirm its acceptance on the global basis. This, as done by Motorola, can be done by any enterprise that has the aspiration of becoming world-class competitor. This sure, guarantees profitability irrespective of the business environment, which is dynamic.

Conclusion and Recommendation

Enterprise that are aspiring to compete in the global market worldwide basis, do not have another route to becoming world-class than focusing entirely on their customers and tailoring all their activities on how to satisfy them. Quality practices that lead to quality products are of paramount importance for enterprises competing on global basis as demonstrated by Motorola in their operations around the globe. Also, any Nigerian firm wanting to do the same cannot divorce itself from such image. Standard organization of Nigeria (SON) and Nigeria Institute of Standards (NIS) are bodies that only ensure that products are made to specifications and those procedures and processes for making them are alright. This, in contrast to Malcom Baldrige, does not measure customer satisfaction which judges whether an enterprise offers value to their customers. Thus, there is need for National Bodies that motivates enterprises to greater level of efficiency as we have in Baldrige Award and Deming prize. The attitude of customers to world-class enterprise like Motorola is positive and this

ensures a continuous flow of earnings, which are channeled into other parts of the world. This ultimately assures such enterprise, as we have in Motorola, to enjoy a financial position that can be so intimidating to their competitors elsewhere in the world imagine Motorola saving up to \$9B because of improvement in the quality of its products.

In concluding this paper the following recommendations are made for local enterprises that want to participate in global wealth sharing. Enterprises should see the entire globe as a market that can be served with their products with zest moreso as the whole world shrinks into a village through technology. Leadership of such enterprises should be passionate enough to create massive support from the employees. Enterprises wanting to go global should develop strategic plan based on benchmarks that compare their performance with the world's best. And finally, Federal government should encourage local firms by dangling "carrots" before them which in turn will shake-off all the shackles of inactivity that has prevented them from being their best. This plan to keep improving all operations continuously will in no time thrust them up the leader of global achievements.

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