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Harry, O. F., & Barinua, V.

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<sup>1</sup> Harry, O. F., & <sup>2</sup> Barinua, V.

<sup>1</sup> Department of management, Faculty of Management Science, Ignatius Ajuru University of Education, Port Harcourt Rivers State, Nigeria

<sup>2</sup> Department of management, Faculty of Management Science, Ignatius Ajuru University of Education, Port Harcourt Rivers State, Nigeria

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**ABSTRACT**

*This study examined the relationship between efficiency improvement and competitive advantage of bottled water manufacturing companies in Rivers State, Nigeria. Efficiency improvement was conceptualized as the independent variable while service quality, innovativeness and market focus were used as measures of the competitive advantage. The study is anchored on system theory and resource-based theory. In pursuance of the objectives of the study, the cross-sectional survey method was adopted. The study revealed that efficiency improvement has positive and significant effects that translate to competitive advantage. It is recommended that management should promote policies on efficiency improvement with a view to improving service quality, innovativeness and market focus in organization.*

**Keywords:** Efficiency Improvement, Competitive Advantage, Service Quality, Innovativeness, Market Focus

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## INTRODUCTION

Organizations in the past enjoyed a relatively stable environment and at such their business environment at that time did not constitute so many problems to them like it is now. The business environment were characterized by many organizations trying to satisfy their immediate environment and at such, their problems were unique to their environment. Hence, every organization in a particular location will tend to have similar problems and such like.

The current environment of businesses, however, is faced with so much inconsistencies that companies and entrepreneurs need to be on their toes strategizing and re-strategizing to gain competitive advantage over their rivals. This is because of the fact that there has been a rapid increase in the number of firms that do businesses, and other factors to be considered (Ottih, 2000). Harry, et al, (2020) opined that the dynamic nature of the business environment invariably plunges organizations into rigorous competition in order to foster production of quality goods and services to the potential customers and consumers in the society. They further argued that, it is evident that the existence and sustainability of every business organization is tied to the capability of its resources to implement strategies capable of engendering competitive advantage.

The term competitive advantage refers to the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Chacarbahi, et al, 1999). It is good to say that, competitive advantage is the uncommon advantage embedded in the resources of organizations. Competitive advantage distinguishes the brand identities from rival organizations. Porter, (1985), defined competitive advantage as the leverage that a business has over its competitors. A firm is said to have a competitive advantage when it is implementing a value creating strategy that has not being implemented by any current or potential player (Clulow, et al, 2003).

Bottled water manufacturing companies invariably indulges in rigorous outsourcing and strategic plans in order to achieve competitive advantage. Competitive advantage is a product of corporate strategy because it creates opportunity for culture and consistency in the growth of the organization (Harry, et al, 2020). Organizational growth and performance emanate as a result of management commitment on corporate strategy which of course has an in-depth correlation with efficiency improvement.

Efficiency is related to the ability to produce a result with minimum effort or resources (Sandrine, 2010). Hence, Efficiency improvement involves cost reduction in all area of its business which had achieved by saving cost, efforts and energy.

Over the years in Nigeria and the whole world at large, several businesses collapsed as a result generated certain ripple effects in the national economy in terms of job lost by workers which in turn increases unemployment rate, low standard of living and insecurity society/criminality and other social visas, due to poor performance or inefficiency or poor corporate strategic policy implementation. This could be attributed to management's inefficiency in the formulation and implementation of policies.

Strategic implementation is a critical success factor of an organization which affects the overall efficiency and effectiveness. Good policy implementation will help an organization guard against environmental shocks. According to Slater & Hutt, (2001), an organization with a well-structured system of management for policy implementation will achieve better and more successful performance. However, any organization that lacks efficiency improvement strategies invariably will have no means of achieving service quality, innovativeness, market focus. Hence, the organization should know how to employ and explore the organizational resource properly. This is the rationale why some organizations do not survive for long periods of time because the

attributes that will engender competitive advantage are deficient. Carlson (2004) drawing from a resource-based view contended, that organizations acquires competitive advantage through internally controlled resources. Organizations gain an advantage over its rivals or competitors based on how they ensure that resources are used responsibly and correctly.

### The Aim of this Study

The aim of this study was to examine the extent of the relationship between efficiency improvement and competitive advantage manufacturing companies in Rivers State, Nigeria. The objectives of the Study included:

- To ascertain the extent of the relationship between efficiency improvement and service quality.

- To find out the extent of the relationship between efficiency improvement and innovativeness.
- To ascertain the extent of the relationship between efficiency improvement and market focus.

In order to accomplish the purpose and objectives of this study, certain relevant questions were formulated:

- How does efficiency improvement relate with service quality of manufacturing companies in Rivers State, Nigeria?
- How does efficiency improvement relate with innovativeness of manufacturing companies in Rivers State, Nigeria?
- How does efficiency improvement relate with market focus of manufacturing companies in Rivers State?

The conceptual framework is shown in figure 1

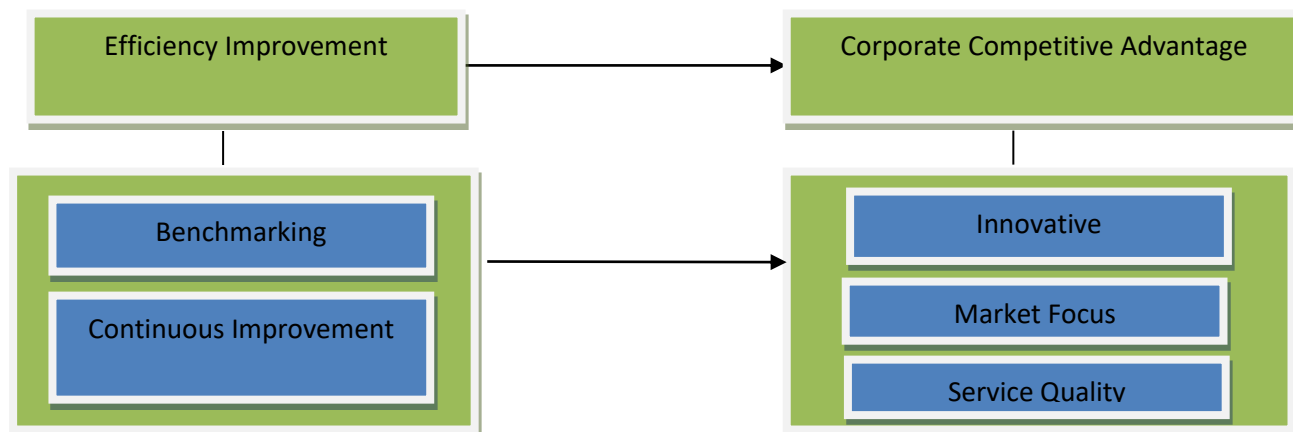


Figure 1: Conceptual Framework

Source: *Research Desk, 2021*

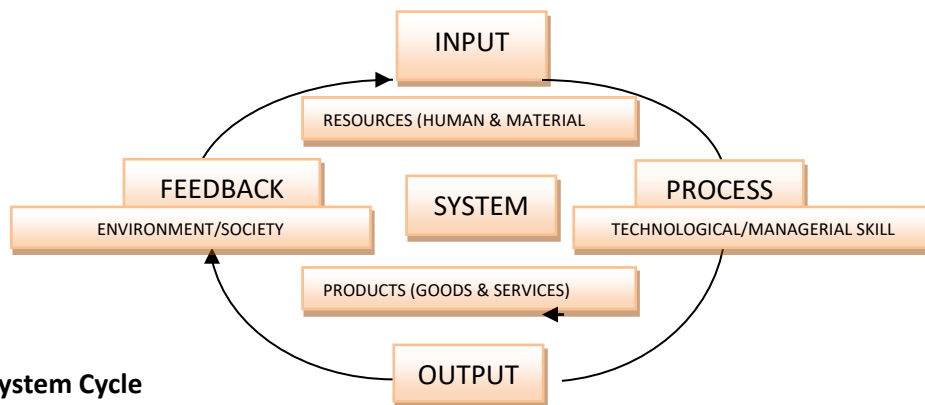
## REVIEW OF RELATED LITERATURE

### Baseline Theory

This study is anchored on systems theory and resource-based theory. Systems theory is based on the idea that variables are in some way related to one another and in turn interact with one another

on the basis of certain identifiable processes (Anderson, 1975). A system is consist of; input (resources other human and material), transformation processes (technological and managerial skills), output (products and services) and feedback (from the environment).

## System Cycle



**Figure 2: System Cycle**

While resource-based theory states that the organization's resources and capabilities generate the competitive advantage instead of the activities of the product market thereby bringing about different organizational performance which are not explained by the factors of the industry (Onuoha, et al, 2017). Organizations are not internally self-sufficient and they cannot generate all the resources they need. Therefore, they depend on their environment for resources, in order to operate, survive and sustain. Resources consist of a bundle of assets, capabilities, organizational processes, firm attributes, information and knowledge (Barney, 1991).

### **The Concept of Efficiency Improvement**

The organizational effectiveness is a business strategy designed to improve the efficiency of the organization without reducing the quality of the products or services. The quality of management is the most influential factors on organizational efficiency; this is because it is the management that chooses how to implement the strategic plans which includes selecting of the method and resource to be used. It is the organizations ability to implement those plan(s) using the lowest possible cost of resource without reducing quality. According to Al-Mashari, et al, (1999) organizations always strives to achieve effectiveness and efficiency so that they can reduce production costs, improve quality of products/services and provide speedy products and services to their customers. The organizational efficiency is the total amount input

of an organization to produce the desire output with a less expenditure of energy, time, money and human and material resources. Hence, the desired effect will depend on the goals of the organization, which could be for example, making a profit by producing and selling a product. Efficiency is doing things right (Drucker, 1963). In order to achieve good results or to obtain an expected outcomes, the organizational activities must be done rightly, staffing must be on 'Best Fit', all things must done in appropriate manners. Efficiency is related to the ability to produce a result with minimum effort or resources (Sandrine, 2010). Hence, Efficiency involves cost reduction in all area of its business which had achieved by saving cost, efforts and energy. Efficiency improvement is the sequential progression of the organizational resource capabilities gearing towards the diligent achievement of the goals through the process modeling strategy. A successful way to increase business process effectiveness to an organization is to add major concentration on the day-to-day business activities of the organization. When business does not have adequate business processes, it cause inefficiency [i.e. waste time, increase cost, resources wastages (material and human)], to which it will likely slow down service quality, reduce employee morale at the end cause customers' dissatisfaction, reduces patronage, wind up the business etc. It is very important to improve business process in order do things right that will leads to the gain on competitive advantage. In order to achieve improvement in efficiency in all



areas of operations, the continuous improvements process and benchmarking should be observed, which as a dimension of efficiency improvement.

#### **Continuous improvement:**

Process was propounded by William Edwards Deming an American management consultant, who took his work (continuous improvement process) to Japan immediately after the World War II, which he taught the Japanese manufacturers on how to continuously improve on quality in order to have an edge over other manufacturers all over the world. In the 1980s the American Automobile manufacturer bring into the use of Deming's theory to solve their extreme quality problems. Continuous improvement is considered one of the most important factors that search for never-ending improvement in output excellence and performance (Talib, et al, 2013).

Brah, et al, (2000), examined total quality management and business performance in the service sector: A Singapore study. Study reveals that successful implementation total quality management tools such as customer focus, quality improvement rewards, top management support, employee empowerment (continuous training and development) and employee involvement improves business performance.

#### **Benchmarking:**

Benchmarking as a way of marking out best practices of super organizations and adopting these practices in order to achieve new goals (Babovic, et al, 2012). They further explained that benchmarking is a method of comparison between its' own and the best possible organization that would contribute to the implementation of best practice solutions, new technologies, improvement of business processes and the quality of products, cost savings, increase of productivity, creativity, innovation and competitiveness on the market, and would lead to satisfying the needs and desires of consumers, as well as achieving efficiency improvement in its' own business. In buttressing this, Garvin, (1993) argues that

real perfect organizations apply the benchmarking as a technique and a catalyst for change or improvement. Thus, it is a method of measuring and comparing an organization's business performance with a reference organization.

Codling, (1998), notes that benchmarking can be technique for obtaining and maintaining a competitive advantage, since the aim is to improve and increase the performance indicators against those of the competitors. He emphasizes that the benchmarking is not a passive exercise but positive activation.

Sylvain, et al, (2006), examined the impact of benchmarking on the operational performance of SMEs organization. Their result shows that, the extreme usefulness of the benchmarking as a tool to increase efficiency.

#### **Concept of Competitive Advantage**

The concept competitive advantage refers to the leverage that a business has over its competitors (Porter, 1985). A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential player (Clulow, et al, 2003). Similarly, competitive advantage is the uncommon advantage embedded in the resources of organizations. However, since the study acknowledges service quality as one of the measures, it is evident that the organizational missions are tied to the organizational resource capabilities at the respective operational unit where the knowledge is shared for the achievement of the competitive advantage. Seemingly, the respective measures of competitive advantage in this study which entails; service quality, innovativeness, and market focus are very significant variables that invariably determines the success of any manufacturing firm all over the world.

#### **Service Quality**

Service quality has been wide examined over the years and it results are still relevant to present day business world, in order to improve today organization to create differentiation and gaining

competitive advantage in this period of borderless world and globalization, (Fotaki, 2015; Ali, et al, 2016). Service quality is the degree and direction of discrepancy between customers' service perceptions and expectations (Parasuramam, et al, 1988). Service quality is of multidimensional construct; The Nordic school of thought postulates that effective service quality should have two important dimensions such as the technical quality (which involves on how the customer perceives the service rendered by the service provider), the other hands, functional quality (which is on how the service provider is able to deliver service to its customer), (Brady, et al, 2001; Gronroos, 1994). Quality service determines the customers preference and equally attracting more potential customers and investors whereby improving the rate of liquidity, performance and market share which are indices of competitive advantage, (Harry, et al, 2020). The intrinsically corporate strategy is adequately implemented in fostering market focus strategy, innovation and service quality and the outcome are the indices of the competitive advantage which the manufacturing companies derived extrinsically. Furthermore customers' satisfaction can be achieved through quality service by the way of continuous improvement (i.e. to train and retrain of the organizational staffs) as efficiency improvement strategies.

### **Innovative**

Over the years, innovation had made easier the manufacturing processes due to the changes in the economy. Trott, (2012), opined that, organizational management constantly involved in the process of idea generation, technology development, manufacturing and marketing of new and improves product/service. However, innovation is a marked departure from traditional management principles, processes and practices or a departure from customary organizational forms that significantly alters the way the work of management is performed, (Hamel, 2016). Davenport, (1993) described innovation as a process that is to be generally a discrete initiative and it also implies the

use of specific change tools and technology for organization engineering and transformation of business process. This is to say that innovation can be described as a systematic which refers to performing the activities of organizational businesses in a new way as new technology emerges in order to gain competitive advantage. Not only to gain competitive advantages, but also to survival and sustained its position. Hence, for an organization to continue to be in business, innovation must be part of them. Innovation is usually concerned with invention, creativity, a new way of doing thing and creation of new idea, in order to solve the organizational problem and or gain competitive advantage.

### **Market Focus**

Market focus strategy also known as the niche strategy or the focus strategy. The term focus strategy refers to when an organization aim at a particular segment of the market (Porter, 1996). Market focus strategy enables business to dominate a niche by concentrating on a limited part of a market. An organization can decide to targets on a particular segment of the whole market by a way of targeting group of customer, product range, geographical location, or service line. This strategy is on two variants; the cost advantage and the differentiation advantage. The cost advantage strategy aim to attain the status of being the producer with the lowest cost in the industry, while the differentiation advantage strategy differentiates the product or service that an organization offers or produces to something unique. Porter, (1998) suggested the differentiation can be effected in an organization and its competitors in same industry and these are; dealer network, marketing promotions, features, technology, design or brand image, etc.

### **Efficiency Improvement and Competitive Advantage**

Deming (1986) argued that improvement of any process cannot be done without measuring its outcomes. This is to say that, the organizational performance improvement needs some

measurements to determine the extent of effectiveness of organizational resources on business performance (Gadenne, et al, 2002; Madu, et al, 1996). Kanji, et al, (2007) pointed out that the first condition to enhance performance and achieve organizational excellence is to develop and implement a performance measurement system. Managers down the line rough out product/market strategies invariably attend to specific and diverse areas in the organization. Specifically, it touches the facts of product content improvement and product context improvement. The continuous implementation of these strategies will invariably lead to the realization of competitive advantage. Product content improvement is components that have the capability of enhancing market share in an organization. However, product content and context improvement emanate from corporate strategies which purpose is to accomplish competitive advantage in terms of marketing effectiveness in engendering customers' satisfaction innovatively more than their rival organizations. Competitiveness is the force that enables a business to have greater focus, more sales, better profit margins and higher customer and staff retention than competitors (Peskett, 2018).

Harry, (2019) study on business process reengineering (BPR) and corporate competitive advantage of bottled water manufacturing companies in Rivers State Nigeria. Study shows that the relationship between efficiency improvement and competitive advantage with its dimensions such service quality, innovation and market focus are very positively strong and significant (where  $P < 0.01$ ).

Therefore, Efficiency improvement has the following quality such as;

- To increase productivity in the organization
- It establishes a strategy for gaining a competition
- It helps establish realistic goals
- It helps promote learning and developmental processes between the employees both junior and senior respectively and their motivation.
- It helps in developing new idea from the inside and outside sources of the organization through continuous improvement.
- To make realistic assessment through benchmarking

### CONCLUSION

The study examined the relationship between efficiency improvement and competitive advantage manufacturing companies in Rivers State, Nigeria. The study finding revealed that improving on efficiency practices positively influences service quality, innovativeness and market focus respectively. It would be also theoretically and practically consistent to assert that manufacturing firms can gain competitiveness by adopting and practicing the principles of improving efficiency.

In conclusion, the study revealed that efficiency improvement has positive and significant effects on competitive advantage. Therefore, it is recommended that management should indulge in strategic policies that will promote efficiency improvement, and effectively managed and utilized organization resources in such a way that allows for service quality, innovativeness and market focus in organization for economy growth. In also, organizational management should create an atmosphere to improve the managerial skill (such as technical skill, conceptual skill, human skill and informative skill) in such a way to gain competitive advantage.

### REFERENCES

- Ali, F., Zhou, Y., Hussain, K., Kumar, P., Neethiahnanthan, N., & Ragavan, A. (2016). Does higher education service quality effect student satisfaction, image and loyalty? A study of international students in Malaysian public universities. *Quality Assurance in Education*. 24(1), 70-94. doi:org/10.1108/QAE-11-2012-0046.



- Al-Mashari & Zairi, M. (1999). Business process reengineering process: An analysis of key success and failure Factors. *Business Process Management Journal*, 5(1), 87-112.
- Anderson, T. (1975). *Analysis of system theory*. Herper.
- Babovic, Jovan & Raicevic, Vuk & Caric, Marko, 2012. "Benchmarking As A Function Of Competitiveness And Efficiency In Business," *Economics of Agriculture*, Institute of Agricultural Economics, vol. 59(1), pages 1-13, April. Handle: *RePEc:ags:iepeoa:123963*. DOI: 10.22004/ag.econ.123963
- Barney, J. B. (1991). Firm Resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Brady, M. K., & Cronin, J. J. J. (2001). Some new thoughts on conceptualizing perceived service quality: A hierarchical approach. *Journal of Marketing*, 65(3), 34-49.
- Brah, S. A. and Jen Li, W. (2000). TQM and Business Performance in the service sector: A Singapore study. *International Journal of Operations and Production Management*. DOI: 10.1108/01443570010348262
- Carlson, S. A. (2004). *Strategic knowledge managing in the context of networks*. International Handbook of knowledge management: Holsapplecycle.
- Chacabaghi, K. & Lynch, R. (1999). Sustainable competitive advantage: Towards a dynamic resource based strategy. *Management Decision*. 37(1), 45-50.
- Clulow, V. J. & Barry, C. (2003). The resource-based view and sustainable competitive advantage: The case of a financial services firm. *Journal of European Industrial Training*, 27(5), 220-232.
- Codling, S. (1998). *Benchmarking*. Gower Publishing Limited
- Deming, W. E. (1986). *Out of crisis*. Cambridge, MA: Massachusetts Institute of Technology Press.
- Davenport, T. H. (1993). *Process innovation: Reengineering work through information technology and business process Redesign*. Harvard Business School, Press.
- Drucker, P. (1963). *The practice of management*. Harper, New York.
- Fotaki, M. (2015). Why and how is compassion necessary to provide good quality healthcare?. *International Journal of Health Policy Manag.*, 4(44), 199-201.
- Gadenne, D. & Sharma, B. (2002). An inter-industry comparison of quality management practices and performance. *Managing Service Quality*, 12(6), 394-404.
- Garvin, D.A. (1993), "Building a learning organization", *Harvard Business Review*, 7(8) 78-91.
- Gronroos, C. (1994). From marketing mix to relationship marketing - towards a paradigm shift in marketing. *Australian Marketing Journal*.2(4), 9-29
- Hamel, G. (2016). The why, what and how of innovation management. *Harvard Business Review*, 84(2), 72-84.
- Harry, O. F. & Ejo-Orusa, H. (2020). Enhanced capability and competitive advantage of bottled water manufacturing companies in Rivers state, Nigeria. *The Strategic Journal of Business & Change Management*,7(1), 171-179.

- Harry, O. F. (2019). Business Process Reengineering and Corporate Competitive Advantage of Bottled Water Manufacturing Companies in Rivers State. Unpublished.
- Kanji, G., & Sá, P. (2007). Performance measurement and business excellence: the reinforcing link for the public sector. *Total Quality Management & Business Excellence*, 18(1-2), 49-56.
- Madu, C. N., Kuei, C. H., & Jacob, R. A. (1996). An empirical assessment of the influence of quality dimensions on organizational performance. *International Journal of Production Research*, 34(7), 43-62.
- Onuorah, C. S. & Olori, W. O. (2017). Business strategies and sustainable competitive advantage of banks in Rivers State. *International Journal of Advanced Academic Research*, 3(11), 28-52.
- Ottih, L. O. (2000). *Entrepreneuring: Towards preparedness*. Pearl Publishers.
- Parasuraman, A., Zeithaml, A. V. & Berry, L. L. (1988). SERQUAL: A multiple item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 14-40.
- Peskett, M. (2018). *Five steps to get a sustainable competitive advantage*. USA: Private Media Pty Ltd.
- Porter, M. E. (1985). *Competitive advantage: creating & sustaining superior performance*: Free Press.
- Porter, M. E. (1996). What is strategy?. *Harvard Business Review*. 5(8), 61-78.
- Porter, M. E. (1998). *The Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press, 1985. (Republished with a new introduction, 1998.)
- Sandrine, K. (2010). Banking efficiency & financial development in Sub-Saharan Africa.
- Slater, S. F. & Hutt, G. M. T. (2001). Marketing contribution to the implementation of business strategy: an empirical analysis. *Strategic Management Journal*, 22, 1055-1067.
- Sylvain Delisle<sup>1</sup> & Josée St. Pierre(2006). An expert diagnosis system for the benchmarking of SMEs' performance. *Benchmarking: An International Journal*. 13(1/2), 106-119. DOI: 10.1108/14635770610644619
- Talib, F., Rahman, Z., & Qureshi, M. N. (2013). An empirical investigation of relationship between total quality management practices and quality performance in Indian service companies. *International Journal of Quality & Reliability Management*, 30(3), 280-318.
- Trott, P. (2012). *Innovation management and new product development*. . Pearson education. 5th.ed.