

# SERVICE CAPACITY UTILIZATION AND COMPETITIVE ADVANTAGE OF PRIVATE MEDICAL SERVICE PROVIDERS IN RIVERS STATE

**HARCOURT, Horsfall**  
Department of Marketing  
Rivers State University, Port Harcourt, Nigeria  
[harcourthorsfall@gmail.com](mailto:harcourthorsfall@gmail.com)

## ABSTRACT

This study examined the connection between service capacity utilization and competitive advantage of private medical service providers in the Rivers State. The survey research method was espoused for the study on a population encompassing one hundred and seventy private medical service providers. The Taro Yamane's formula was used to arrive at one hundred and nineteen (119) medical service providers as the sample size of the study. Purposive sampling was adopted to draw one management staff from the marketing, sales and customer service units of the service providers. A 5-point likert-scale questionnaire was administered on the respondents, of which 350 copies questionnaire were returned, obtaining a 98 per cent response rate. The study adopted the Spearman's Rank Order correlation as the test statistic. The results showed that service capacity utilization has a strong, positive and statistically significant connection with competitive advantage through cost leadership and product differentiation. The study therefore concludes that, service capacity utilization significantly drives competitive advantage of private medical service providers in Rivers State, and recommends that service capacity of private medical service firms should be tailored towards orchestrating service deliveries that enable them achieve competitive advantage.

**Keywords:** Competitive advantage, cost leadership, product differentiation, service capacity utilization

## INTRODUCTION

AN understanding of industry attractiveness and analysis of competitors guide firms in their choice of strategy. A firm's search for competitive advantage begins with the strategic choices it makes with regards to its position in an industry. However, firms must also understand how to interpret strategy into competitive advantage. A firm must define how to implement the strategy selected to achieve competitive advantage. The subject of firm performance has been a principal topic in strategy research for decades and incorporates most relevant questions that have been discussed in the field, as, why firms vary their behavior, how strategies are chosen and how they are managed (Porter, 1985). In the view of scholars, strategic moves and postures taken by firm are mostly in response to these concerns. Service capacity utilization is thus calculated strategic choice operators of private medical facilities often make, in their efforts to achieve and sustain competitive advantage.

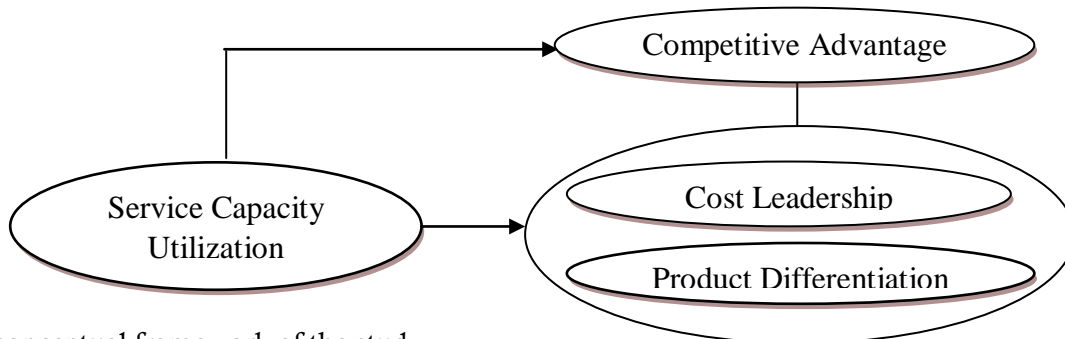
The goal of service capacity utilization is to ensure optimal use of available resources to deliver competitive service offerings. Service capacity is built up of several core competencies necessary for "coordinating diverse production skills and integrate multiple streams of technologies" (Prahalad & Hamel, 1990). It involves a structured set of competencies that constitute proactive, relational, coordinative people and technology

dimensions desired to deliver specific service offerings (Baltacioglu *et al.*, 2007; Ellram *et al.*, 2004). To identify processes relevant to service settings, structural and managerial differences between service and manufacturing supply chains are seriously considered, in line with the Unified Service Theory (UST). UST provides a framework to conceptualize service operations management and differentiate between service and manufacturing operations issues. UST also recognizes the bidirectional nature of service supply chains where customers provide resources and labor or act as production managers. Features unique to service offerings include customer-supplier duality, service quality heterogeneity, intangibility, and simultaneous production and consumption (Boon-itt, 2009).

In today's highly competitive business climate (Christoph & Halldorsson, 2009), creating sustainable competitive advantage is a major challenge for firms (Laseter & Gillis, 2012). A growing number of scholars have devoted considerable efforts to the field of service supply chain with a view to showing sustainable competitive advantage can be gained and sustained (Benjaafar *et al.*, 2013). Despite these contributions, the problem of lack of sustainable competitive advantage still persists, especially among service providers. Thus, this study opts to examine the association between service capacity utilization and competitive advantage of service capacity utilization and competitive advantage private medical service providers in rivers state. The study took a unidimensional view of service capacity utilization; while competitive advantage was decomposed into cost leadership and product differentiation. The study is guided by the hypotheses and conceptual framework in fig 1.

**Ho<sub>1</sub>:** Service capacity utilization does not significantly influence cost leadership of private medical service providers in Rivers State.

**Ho<sub>2</sub>:** Service capacity utilization does not significantly influence supply chain responsiveness of private medical service providers in Rivers State.



**Fig. 1:** conceptual framework of the study  
Sources: Researchers desk (2022).

## LITERATURE REVIEW

### Service Capacity Utilization

Service capacity is the highest quantity of output possible in a given time period with a predefined level of staffing and resources. Since service demand is heterogeneous and service is produced and consumed simultaneously (Sullivan, 1982), service firms need to constantly update capacity and resource information (Baltacioglu *et al.*, 2007; Klassen & Rohleder, 2001). Service capacity utilization encompasses service capacity planning, customer job scheduling, workforce scheduling, and facilities and equipment scheduling

(Mabert, 1982). It is a competence in optimally managing service capacity to meet demand (Cho *et al.*, 2012; Baltacioglu *et al.*, 2007). This includes the ability to identify and manage tangible resources, such as facilities, labor, inventory and capital as well as intangible resources, such as skills, experience, and knowledge (Froehle & Roth, 2007; Kellogg & Nie, 1995). Therefore, Service capacity utilization is a unique competence in defining and constantly tracking the available capacity to meet varying demand by fine-tuning service capacity better than competitors.

### **Concept of Competitive Advantage**

Competitive advantage is an essential foundation for devising business strategies to attain sustainable growth. The important elements of competitive advantage pertaining to the creation of values to customers were developed by Porter (1985), who proposed three generic strategies: cost leadership, differentiation, and focus. Such competitive strategies are supposed to respond to the objectives of businesses effectively and are commonly adopted by firms. However, in order to achieve competitive advantage, it is necessary for firms to create economic value for customers (Barney & Hesterly, 2010). Business sustainability is achieved through competitive advantage; whereby upon formulation of strategies, it is necessary to create value to customers. Such value may be in the form of low cost that presents products to customers at fair prices, the aspect of differentiation, or the aspect of better responsiveness to customer needs in the niche market than competitors in the same industry. Indeed, competitive advantage is regarded as the ability of the organization to differentiate itself from other competitors. Hence, the creation of competitive advantage that encompasses all business processes should primarily take into consideration, the value presented to customers. Once customers acknowledge the value of product, they will be able to differentiate such products from those of competitors. This study adopts cost leadership and product differentiation as measures of competitive advantage.

### **Cost-leadership**

Cost leadership is both a strategy and company objective. As a strategy, cost leadership is one deployed by a firm that seeks to become the low cost producer in its industry; and to gain market share by appealing to cost-conscious customers (Ateke & Nwokah, 2022). Although any firm will aim to eliminate all unnecessary costs, those employing this strategy prioritize lowering all overheads. The sources of cost advantage are varied and depend on the structure of the industry; and include the pursuit of economies of scale; proprietary technology; preferential access to raw materials and other factors of production; access to capital or technology required to drive costs down; high levels of productivity; highly efficient capacity utilization; use of bargaining power to negotiate low prices for raw materials; lean production methods; effective use of technology in the production process; and access to effective distribution channels (Porter, 1980). Low cost producers find and exploit all sources of cost advantage. If a firm can achieve and sustain overall cost leadership, then it will be an above average performer in its industry, provided it can command prices at or near the industry average.

As an objective, cost-leadership focuses on gaining a competitive advantage by having the lowest cost in the industry (cost advantage); which allows the firm to be low-cost producers, thus making more profits than rivals due to low costs of designing and economies of scale

(Barney, 2007). A firm becomes a cost-leader through the use of experience as a result of investment in production, conservation and careful monitoring of operating costs so as to optimize organizational performance (Igwe, Idonedo, & Ebenuwa, 2020). Cost leadership makes it possible for firms to gain a competitive edge by increasing sales growth. A firm with a sustainable cost advantage over competitors can use that lower cost as a basis for either underpricing competitors and gaining a larger market share or earning a higher profit margin by selling at the going price (Ateke & Nwokah, 2022). This as well requires the firm to be better than rivals in efficiency and cost control and continuously seek creative and innovative ways of cutting costs. Successful low-cost firms achieve cost advantages by exhaustively pursuing cost savings throughout the activity cost chain (Brooks, 2010).

### **Product differentiation**

Value differentiation can be defined as positioning a brand in such a way as to differentiate it from the competition and establish an image that is unique (Li *et al.*, 2006). The general focus of differentiation-led firms is to make products that are different or more attractive than any other within the industry; in order to achieve a competitive advantage. Differentiation encourages firms to seek competitive advantage by offering unique products and experiences to customers; especially, along some dimensions that are widely valued by customers (Ateke & Nwokah, 2022). Differentiation results to selecting one or more attributes that many buyers in a market perceive as important, and uniquely positioning the firm to meet those needs. Product differentiation rewards the firm for its uniqueness with a premium price (Porter, 1985). There are several ways by which this can be achieved, though it is not easy and requires substantial and sustained marketing investment. Some of the ways Differentiation can be achieved include offering superior product quality in terms of features, benefits, durability or reliability; branding (strong customer recognition; brand loyalty); wide market coverage through distribution using major channels; consistent promotional support; strong research, development and innovation; and providing utility by offering products that meets customers' preferences (Porter, 1985).

Successful value differentiation requires the firm to carefully analyse customer's requirements and preferences, to identify the feasibility of integrating various differentiating features into a unique product that contains desired attributes. The firm can then price the product higher than competitors. Differentiating features may include product performance, ease of use, durability, superior service, etc.

Differentiation increases perceived value of products compared to competitors; and create customer preference (Porter, 1985). The existence of differentiation is always a matter of customer perception, but firms can take a variety of actions to influence these perceptions. This implies that differentiation can be done specifically for goods to make them attractive, or for a service through the utilization of after-sales services like consideration of quality, incentive programs, increased operating hours, etc. Product differentiation includes physical aspects like location, space, design and display/layout and store atmosphere (Igwe *et al.*, 2020); and improves a firm's image in the market; and create sensitivity of buying process for customers. Fastfood can use this technique to establish a strong identity, brand relevance and esteem in a specific market (Ateke & Nwokah, 2022).

## **METHODOLOGY**

The study adopted a quantitative research which permits the use of questionnaire, and the positivist ontology as the study attempts to stimulate practicality by dualism. The target population for the study was the one hundred and seventy (170) private medical service providers in Rivers State of Nigeria, whose authentic list was ascertained from the Rivers State Ministry of Commerce and Industry, Port Harcourt as at May, 2021, while the sample size of the study based on the Taro Yemane formulae was 119.

The study acknowledged three departments that are more involved in the prime sphere: marketing, sales and customer service. One management staff was purposely chosen from each of the acknowledged departments, to realize three management staff for each firm and 357 management staff for the total sample. Respondents were cautiously chosen based on confident significance to the study not their comprehensive embodiment to the population. All the respondents were staff unswervingly or circuitously involved in service delivery procedures. Out of the 357 copies of questionnaire administered 350 copies were retrieved and used in the final analysis. This represents a response rate of 98 per cent. The data was analyzed by means of quantitative techniques, whereby the findings was presented in the form of frequency distribution and pie charts while qualitative techniques were used in the study to smooth description and explanation of the findings. The internal consistency of the instrument used in the study was confirmed via the Cronbach's Alpha to conceivably launch the result of the instruments illuminating constructs. The results of the reliability test show Cronbach's Alpha coefficients of 0.978, 0.859 and 0.856 respectively, for service capacity utilization, cost leadership and product differentiation. The Spearman's Rank Order Correlation served as the test statistic.

## RESULTS AND INTERPRETATION

**Table 1: Correlation Between Service Capacity Utilization and measure of competitive advantage**

			Service Capacity Utilization	Cost Leadershi p	Product Differentiat ion
Spearman' s rho	Service Capacity Utilization	Correlation	1.000	.695**	.768**
		Coefficient			
		Sig. (2-tailed)	.	.000	.000
	Cost Leadership	N	350	350	350
		Correlation	.695**	1.000	.726**
		Coefficient			
Product Differentiat ion	Sig. (2-tailed)	.000	.	.000	
	N	350	350	350	
	Correlation	.768**	.726**	1.000	
		Coefficient			
		Sig. (2-tailed)	.000	.000	.
		N	350	350	350

Source: SPSS output of data analysis on service capacity utilization and competitive advantage (2022).

The results as presented on Table 1 indicate that service capacity utilization significantly contributes to the manifestation of competitive advantage in terms of cost leadership and product differentiation in the population surveyed. This is as the evidence presented

identifies service capacity utilization as significantly contributing towards cost leadership at a  $\rho = 0.695$  and  $P = 0.000$ ; and product differentiation at a  $\rho = 0.768$  and  $P = 0.000$ . The results demonstrate that service capacity utilization significantly relates to competitive advantage and as such the study holds that there is a significant relationship between service capacity utilization and competitive advantage of private medical service providers in Rivers State in terms of cost leadership and product differentiation.

### DISCUSSION OF FINDINGS

This study examined the correlation between service capacity utilization and competitive advantage of private medical service providers in Rivers State. The results of the empirical analysis demonstrate that service capacity utilization inform competitive advantage of private medical service providers in Rivers State, in terms of cost leadership and product differentiation. The relationships between service capacity utilization and the measures of competitive advantage (cost leadership and product differentiation) were both observed to be statistically significant. However, the strongest relationship is between service capacity utilization and product differentiation.

The findings of the current study supports the position of the marketing concept that firms will outperform rivals if they understand and provide value that aligns better with customers' needs and preferences. The notion service capacity utilization invariably suggests that the firm invests in service delivery facilities in anticipation of customers' demand. The findings of the current study also align with the report that competitive advantage is achieved through deliberately orchestrated efforts. The current results also align with the report of Igwe, *et al.* (2020) that, in addition to obtaining information and ideas, service capacity utilization is substantially enables firms to outperform rivals (Ateke & Iruka, 2015). Igwe, *et al.* (2020) avers that successful new business models are characterized by more tasks to be performed by customers. Hence, service capacity utilization a key element in service delivery geared towards achieving competitive advantage (Iruka & Ateke, 2014).

### CONCLUSION AND RECOMMENDATIONS

The intensity of competition in today's business world dictates that firms must strive to achieve competitive advantage. This challenge is aggravated by globalization and information and communication technology which has pitched firms in one country in a direct competition with firms in another. Firms' needs to grow and survive also dictate activities aimed at creating value for customers in order to retain and expand relationships with them; and in return, enjoy sustained competitive advantage. Based on the findings of this study and the discussions that followed, the study concludes

The purpose of this study was to find examine the interplay between service capacity utilization and competitive advantage of private medical service providers in Rivers State. The results obtained from the empirical analysis show that there is a statistically significant correlation between service capacity utilization and competitive advantage of private medical service providers in Rivers State. The study therefore, concludes that service capacity utilization result in competitive advantage of private medical service providers in

Rivers State; and competitive advantage of private medical service providers in Rivers State largely depends on their ability to optimally utilize service capacity. The study recommends private medical service providers in Rivers State that seek to achieve sustainable competitive advantage should seek ways of fully utilizing their installed service capacity; as this is likely to result in cost leadership and differentiation, which are manifest properties of competitive advantage.

## REFERENCES

- Ateke, B. W., & Nwokah, N. G. (2022). *Marketing management: A strategic perspective*. BrandedFavour.
- Ateke, B. W., & Iruka, H. C. (2014). Investigating the relationship between customer involvement management and marketing performance in the manufacturing industry. *International Journal of Research in Business Studies and Management*, 2(9), 22-34.
- Baltacioglu, T., Ada, E., Kaplan, M., Melike, Y.O., Kaplan & Y.C. (2007). A new framework for service supply chains. *The Service Industries Journal*, 27(2), 105-124.
- Barney, J. B., & Hesterly, W. S. (2010). VRIO framework. *Strategic Management and Competitive Advantage*, 3, 68-86.
- Boon-itt, S. (2009). The effect of internal and external supply chain integration on product quality and innovation: Evidence from Thai automotive industry. *International Journal of Integrated Supply Management*, 5(2)97-112.
- Braunscheidel, M. J. (2005). *Antecedents of supply chain agility: An empirical investigation*. Published PhD Thesis. School of Management University of Buffalo the State University of New York.
- Brooks, M. R. (2010). International competitiveness: assessing and exploring competitive advantage by ocean container carriers. *Logistics and Transportation Review*, 23(3), 275-93.
- Chen, D. Q., Preston, D. S., & Xia, W. (2013). Enhancing hospital supply chain performance: a relational view and empirical test. *Journal of Operations Management*, 31, 391-408.
- Cho, D. W., Young, H. L., Ahn, S. H., & Hwang, M. K. (2012). A framework for measuring the performance of service supply chain management. *Computer & Industrial Engineering*, 62, 801-818.
- Chung-Herrera, B. G. (2007). Customers' psychological needs in different service industries. *Journal of Service Marketing*, 21(2), 263-269.
- Conboy, K. (2009). Agility from first principles: reconstructing the concept of agility in information systems development. *Information System Research* 20(3), 329-354.
- Costantino, N. Mariagrazia, D., Marco, F., Maria, P. F., & Agostino, M. M. (2012). A model for supply chain management of agile manufacturing supply chains. *International Journal of Production Economics* 135(1), 451-457.
- Duclos, L. K., Vokurka, R. J., & Lummus, R. R. (2003). A conceptual model of supply chain flexibility. *Industrial Management & Data Systems*, 103(6), 446-456.
- Ellram, L. M., Tate, W. L., & Billington, C. (2004). Understanding and managing the services supply chain. *Journal of Supply Chain Management*, 40(4), 17-32.

- Froehle, C. M., & Roth, A. V. (2004). New measurement scales for evaluating perceptions of the technology-mediated customer service experience. *Journal of Operations Management*, 22, 1-21.
- Froehle, C.M. & Roth, A.V. (2007). A resource-process framework of new service development. *Production and Operations Management*, 16(1)69-188.
- Holweg, M. (2005). The three dimensions of responsiveness. *International Journal of Operations & Production Management*, 25(7), 605-615.
- Igwe, S. R., Idonedo, O. W., & Ebeuwa, A. (2020). Customer involvement practices and competitive advantage of apparel designers in Port Harcourt. *Journal of Contemporary Marketing*, 5(1), 11-24.
- Iruka, H. C., & Ateke, B. W. (2014). Customer involvement management practices and customer retention in the hospitality industry. *International Journal of Business and Social Sciences*, 5(8), 61-72.
- Kellogg, D. L., & Chase, R. B. (1995). Constructing an empirically derived measure for customer contact. *Management Science*, 41, 1734-1749.
- Klassen, K. J., & Rohleder, T. R. (2001). Combining operations and marketing to manage capacity and demand in services. *The Service Industries Journal*, 21(2)1-30.
- Kotz, S., & Johnson, N.L. (2002). Process capability indices review, 1992-2000, *Journal of Quality Technology*, 34(1)2-53.
- Lumms, R. R., Duclos, L. K., & Vokurka, R. J. (2003). Supply chain flexibility: Building a new model. *Global Journal of Flexible Systems Management*, 4(4). 1-13.
- Mabert, V. A. (1986). Staffing and equipment decisions for services: an experimental analysis. *Journal of Operations Management*, 6(3/4),273-281.
- Moeller, S. (2010). Characteristics of services: A new approach uncovers their value. *Journal of Services Marketing*, 24(5), 359-368.
- Porter, M. (1985). *Competitive advantage: Creating and sustaining superior performance*. Macmillan.
- Prahalad, C. K., & Hamel, G. (1990). *The core competence of the corporation*. *Harvard Business Review*, 79-91.