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SUPPLIER MANAGEMENT PRACTICES AND PERFORMANCE OF PRIVATE HOSPITALS IN UASIN GISHU CITY COUNTY, KENYA

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Purpose: This study sought to explore on the relationship between supplier management practices and performance of Private hospitals in Uasin Gishu County, Kenya. The specific objectives were: supplier segmentation, supplier performance, supplier collaboration and supplier risk management on performance of Private hospitals in Uasin Gishu County. The study was guided by relational theory, grey system theory, game theory. Descriptive survey design was used in this study.

Keywords: supplier segmentation, supplier performance, supplier collaboration and supplier risk management on performance of Private hospitals

Introduction

Supplier management as a new concept was developed by the supply chain management principles due to the rapid development of the economy and this has shown that competition is no longer the traditional competition between companies, instead between the supply chains (Patrucco, Luzzini & Ronchi, 2017). However to make sure that connection of the firms in the supply chain exists it is good for the firms to focus on strategic alliance and cooperation as the key topics in their strategic development plan. Since it is vital to maximizing the overall performance of the supplier management practices. Supplier management is a business process that allows a company to adequately select its vendors and negotiate the best prices for goods and services that it purchases. Senior managers monitor the corporate supply chain to ensure that vendors familiarize themselves with the company's operating activities and manufacturing processes (Arthur, 2009). Supplier management practices are those managerial actions undertaken to improve performance of the procurement function. Other authorities have considered the supplier management practices to be set of activities undertaken by an organization to promote effective management of its supply chain as the approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in an effective way (Sindiga, Paul & Mbura, 2019).

1.1.1 Statement of the Problem

According to World Bank report of 2018, performance of private hospitals has declined at an alarming rate resulting to a decrease in global GDP to 4.7% (WB, 2018) from 6.2%. A research conducted by Faghih (2018), reveals that there is a drastic mock in the pressure on supplier management practices to find new ways to create and deliver value to customers to improve on their performance of private hospitals. The performance of private hospitals in Kenya is highly competitive. According Okumu and Bett (2019) performance of private hospitals has been declining towards customer satisfaction survey of 2018, 2019 and 2020, has been fluctuating from 69 to 46% due to supplier management practices and this was mainly attributed to complaints from patients in private hospitals. Therefore this study would carried out in the Kenyan context to bridge the existing gap by new knowledge out of this research findings.

2.1 Resource Based View Theory

Resource-Based View (RBV) theory was developed by Becker (1962). According to Becker (1962), the resource-based view examines the link between a firm's internal characteristics and performance'. Building the resource-based view enable firms to determine their core competences which are also critical for the creation of the latter (Myerson, 2013). This theory will be adopted since suppliers are considered resources to the institutions. RBV believes that a firm's resources and capabilities are its most important assets. So, the primary concern of RBV is about obtaining access to another firm's core competencies to gain competitive advantage. According to Curado, (2006) suppliers can be regarded as resources in case they are "sufficiently bound to a firm". With these assumptions they clearly follow the extended resource-based view, such as the relational view as mentioned, implying, resources can also be obtained through interfirm connection from the external environment.

Knowledge-Based Theory

The main concept of the knowledge-based theory of the firm is that organizations exist in the way that they do because of their ability to manage knowledge more efficiently than is possible under other types of organizational structures, such as private hospitals. Organizations are social entities that use and store internal knowledge, competencies, and capabilities that are vital for the firm's survival, growth, and success (Bandura, 1989). The theory emphasizes the organizational need for superior coordination and integration of learning by employees inside the organization

(Bratton, 2003). The Knowledge-based view of the firm is a recent extension of the Resourcebased view of the firm and is adequate to the present economic context. It is considered to be a very special strategic resource that does not depreciate in the way traditional economic productive factors do and can generate increasing returns (Curado, 2006). According to (Grant & Bocconi, 2019), many firms consider that to act with efficacy in today's economy, they must become a knowledge-based organization. However, few understand what that means, and how to make the changes necessary to achieve it. Perhaps the most common mistake firms make is considering that the higher the knowledge content of their products and services, the closer they are to being true knowledge-based organizations (Carver, 1996). This study has adopted knowledge theory to understand the effect of supplier performance on performance of Private hospitals in Uasin Gishu City County, Kenya, hence it gives a background of this study.

Dynamic Capability Theory

Dynamic capabilities theory postulated how firms integrate, build, and reconfigure their internal and external firm-specific competencies into new competencies that match their turbulent environment (Peters, 2015). Business organizations are required to respond to dynamic environments by adapting their supply chain resources. According to the dynamic capability theory firms can use their own particular internal and external abilities and knowledge and develop new capacities to struggle with changing environments. The linkage between SCM and dynamic capability is growing in research and has been focused on the scientific community for several years (Liu, 2011). The dynamic capabilities view is a widely applied theory to explain the difference in performance across competing firms. It refers to the ability of a firm to integrate, build, renew, adapt, and reconfigure its resource base in response to dynamism in the external changing environment. The dynamic capability view proposes that resource configuration rather than control over a resource leads to competitive advantage. This means if a partner in the supply chain, the value creation, controls the resource and competitive advantage might only be realized in combination with other resources controlled by other partners in the chain (Yin, 2012). This study has adopted Dynamic capabilities theory in order to understand the effect of supplier collaboration on performance of Private hospitals in Uasin Gishu City County, Kenya, hence it gives a background of this study

Game Theory

Game theory is largely attributed to the work of mathematician John von Neumann and economist Oskar Morgenstern in the 1940s and was developed extensively by many other researchers and scholars in the 1950s. Game Theory usually contains three basic elements: the set of players, the strategy space and the payoff functions (Zhang, 2013). Game theory is divided into two parts; non-cooperative game theory and cooperative game theory. Models in non-cooperative game theory imagine each player in the game improves his own objective and does not take care of the effect of his decisions on others (Becker, 1962). In comparison, cooperative game theory presumes that players can make binding agreements. Whatever the sort of the overall game, the pursuit of balance and stability of the supply chain is usually the ultimate goal hence equilibrium is created. Nash equilibrium is a profile of strategies such that each player's strategy is an optimal reply in response to the other players' strategies (Bandura, 1977).

Supplier Segmentation

Supplier Segmentation is one of the key activities of supplier relationship management (SRM) for companies with a large number of suppliers. It involves dividing the suppliers into a manageable number of segments, to formulate SRM strategies for the various segments, rather than for each individual supplier (Chemoiywo, 2018). Supplier relationship management programs represent an investment of time and resources. Thus, not every supplier qualifies for the same level of inclusion in such a program. Firms should therefore strategically analyze each

supplier to determine which suppliers are best positioned to provide the greatest return to the company through closer collaboration, other than having a 'one size fits all' strategy for supplier management. Supplier segmentation represents a step between supplier selection and supplier relationship management, and helps determine distinct groups of suppliers based on their similarities. A company's ability to strategically segment suppliers in such a way as to realize the benefits of both the arms-length as well as the partner models may be the key to future competitive advantage in supply chain management and thus represents a strategic approach for companies with a great number of suppliers (Green, 2019).

In recent decades, supplier participation has increased dramatically in terms of delivering products and services tailored to customer needs, making supplier management a key element in supply chain management. Therefore, companies adopt strategies to select, evaluate and manage relationships with their suppliers. In other words, qualifying, selection, segmentation, monitoring and controlling suppliers have become key elements in supply chain management (Green, 2019). Without a systematic approach, working with a large number of suppliers, each with their own competitive advantage, is definitely difficult. According to Islam et al. (2021), supplier segmentation involves grouping together suppliers with shared characteristics, which can be grouped on the basis of different models or based on factors that are considered relevant by the decision-maker. As such, supplier segmentation plays a key role in enhancing the firm's operational capabilities in supply management, generating value and synergy in relation to the supplier. Evidence suggests that supplier segmentation, in theory or in practice, plays an important role in enhancing the performance and efficiency of supply chains (Ongeri & Osoro, 2021).

Examining existing studies in this area may shed further light on this issue and its role in the supply chain. Green (2019) examined existing approaches and Day et al. (2010) evaluated supplier segmentation in certain studies, dividing the relationships into two categories (power and dependence, and relationships). However, they did not include all the relevant aspects of supplier segmentation, while other researchers never went beyond mentioning supplier segmentation in their literature review. She, on the other hand, divided existing supplier segmentation studies into three methods: process, portfolio and engagement (Ongeri & Osoro, 2021).

Supplier Performance

Performance of all participating Vendors/ Suppliers/Contractors/ Consultants need to be closely monitored to ensure timely receipt of supplies from a Vendor, completion of an assignment by a Consultant or complete execution of order by a contractor within scheduled completion period (Green, 2019). For timely execution of projects and meeting the operation & maintenance requirement of operating plants, it is necessary to monitor the execution of order or contracts right from the award stage to completion stage and take corrective measures in time. The objective of Evaluation of Performance aims to recognize, and develop reliable Vendors/ Suppliers/Contractors/ Consultants so that they consistently meet or exceed expectations and requirements. The purpose of this procedure is to put in place a system to monitor performance of Vendors/ Suppliers/Contractors/ Consultants associated with GAIL so as to ensure timely completion of various projects, timely receipt of supplies including completion of works & services for operation and maintenance of operating plants and quality standards in all respects (Ongeri & Osoro, 2021).

Performance rating data Sheet for each and every Vendor/ Supplier/Contractor/ Consultant for all orders/Contracts with a value of Rs. 7 Lakhs and above is recommended to be drawn up (Green, 2019). These data sheets are to be separately prepared for orders/ contracts related to Projects and O&M. Format, Parameters, Process, responsibility for preparation of Performance Rating

Data Sheet are separately mentioned. Based on the parameters defined in Data Sheet, Performance of concerned Vendor/ Supplier/Contractor/ Consultant would be computed and graded accordingly. The measurement of the performance of the Party would be its ability to achieve the minimum scoring of 60% points in the given parameters. Depending upon the Grading of Performance, corrective measures would be initiated by taking up the matter with concerned Vendor/ Supplier/Contractor/ Consultant. Response of Vendor/ Supplier/Contractor/ Consultant would be considered before deciding further course of action. Implementation of Corrective Measures: Based on the response of Vendor/ Supplier/Contractor/ Consultant, concerned Engineer-in-Charge for the Projects and/or OIC in case of O&M would recommend for continuation or discontinuation of such party from the business of GAIL. Orders/contracts placed on Proprietary/OEM basis for O&M will be evaluated and, if required, corrective action will be taken for improvement in future (Ongeri & Osoro, 2021).

Supplier Collaboration

Collaboration requires a change in mindsets among buyers and suppliers, who may be used to more transactional or even adversarial relationships. And most collaborative efforts need intensive, cross-functional involvement from both sides, a marked change to the normal working methods at many companies (Green, 2019). This change from a cost-based to a value-based way of thinking requires a paradigm shift in many firms that is often difficult to come by. The actual value generated by collaborating can also be difficult to quantify, especially when companies are also pursuing more conventional procurement and supply-chain improvement strategies with the same suppliers, or when they are simultaneously updating product designs and production processes. And even when companies have the will to pursue greater levels of supplier collaboration, leaders often admit that they don't have the skill, lacking the structures they need to design great supplier-collaboration programs, and being short of staff with the capabilities to run them. After all, what great supplier collaboration necessitates is much more than the mere application of a process or framework it requires the buy-in and long-term commitment of leaders and decision makers (Ongeri & Osoro, 2021).

For contemporary firms, business practices related to supply management are not only an internal issue, but much more an issue regarding collaborative inter-firm networks since inter-firm networks eventually determine the boundaries and opportunities of value creation and capture (Green, 2019). Developing long-term relationships and forming collaborative networks with strategically important suppliers has been a significant issue in supply chain management for years, stated that firms emphasizing the role of supply management as one of the elements of competitive advantage are actively striving to foster better relationships with their suppliers. Collaboration has become particularly important as knowledge and capabilities have become more dispersed in the network economy and the business environment has become more volatile and competitive. Supply management in general has become an increasingly important success factor in many firms, and performance has improved significantly along with the recognition of the strategic nature of the function (Ongeri & Osoro, 2021).

Supplier Risk Management

Today, supply chains typically include multiple partners, with services and sourcing managed across several organizations and in jurisdictions across the world. Corporates are increasing their use of third-party suppliers in the execution of key strategic imperatives (Green, 2019). In many cases, these sourcing and offshoring activities are becoming more extensive and sophisticated in order to capture the next level of service delivery, processing efficiency and cost savings. Yet, unless your supplier risk management framework has also evolved, you could face unexpected risks and not capitalize on the potential benefits. You need an overall framework that enables you to manage supplier risk throughout the sourcing lifecycle. A supplier risk management

framework not only offers increased levels of control; it can also help your organization maximize value by offering: A more reliable and consistent process for managing supplier risk; Competitive differentiation through a transparent purchasing policy that supports your corporate social responsibility guidelines; Increased operational efficiency and reduced costs through centralized contract management; An enhanced ability to outsource noncore activities and partner with strategic suppliers on key activities; and A reduced need to replace failed suppliers. The objective is to encourage cost effective sourcing, while ensuring the risks and accountability for end-to-end sourcing and service delivery are clearly defined, managed, monitored and understood by both your organization and your supplier (Ongeri & Osoro, 2021).

Supplier risk exists for an organization when supply market behavior and the organization's dealings with suppliers, create outcomes which harm company reputation, capability, operational integrity and financial viability. Green (2019) identifies these procurement risks as; a company's dependency on a supplier, unanticipated price volatility of raw material, supplier quality problems, supply chain disruptions, unanticipated price volatility through currency exchange rates, supplier bankruptcy, legal/regulatory issues and supplier dependency on a company. Risk management is in close contact with supplier management because suppliers are also a source of risk. Supplier risk management is the implementation of strategies to manage both every day and exceptional risks along the supply chain based on continuous risk assessment with the objective of reducing vulnerability and ensuring continuity. Supply chain involve many risks, nevertheless, supply chain has proven instrumental in improving efficiency within many industries ((Ongeri & Osoro, 2021).

These risks can be product failure, disruption, regulatory risk, reputational risk, legal risk, supplier size, financial risk and competitive risk (Green, 2019). Supply risk management practices are the measures taken including changes to behaviors, procedures and controls which remove procurement risks or reduce them to what is considered to be an acceptable level. In this study, supplier risk management was measured by risk identification, risk assessment and dual sourcing. Supplier operational risks emerge at every step of the value chain. By creating a holistic, data-driven supplier operational risk segmentation, we are able to uncover issues sooner (Ongeri & Osoro, 2021).

Performance of Private Hospitals

Measurement of organizational performance is done to ensure employees are meeting objectives, staff are motivated, budget priorities are determined, comparison is done in relation to competitors' activities, individual and organizational objectives are aligned and plans for performance improvement are formulated among others (Green, 2019). Atkinson, She explained that measurement of performance should aid an organization in understanding and assessing worth received from employees and suppliers, value from stakeholders, how efficient procedures in an organization are, and strategic assets of an organization. Based on the above-mentioned issues, it can be said that measurement of performance plays the role of diagnostic, monitoring and coordination. Thus, there should be well placed goals, strategies and performance variables. It is essential for every organization for it enables the organization to gauge their efficiency and effectiveness of the external and internal processes by the use of the specific metric of measurement. Organizations should establish complete systems of concise performance measures to sustain competitiveness especially in management of the supply chain. It is vital to determine the performance metrics that will audit plans and carry out corrective actions if there is a disparity with planned outcome (Ongeri & Osoro, 2021).

According to Green (2019) some of the key indicators of performance are production efficiency, improved quality of service, reduced customer complaints, decreased cost, reduced cycle time, improved workflow and compliance with environmental and industry regulations and

requirements. She claims that performance in all the areas of an organization is one way or the other can be affected by the kind of supplier relationship management strategies adopted by a firm. Bearing in mind that the competitive advantage in most industries is based upon its network of suppliers, it behooves the companies to have an influence over its suppliers in ways that touch on degree and intensity; performance is grounded upon the supply base thus the only way out is the designing, set up and management of the entire network of suppliers (Ongeri & Osoro, 2021).

The objective of private hospital is to realize and keep up high performance which leads to organization's growth and progress (GoK, 2019).). According to Green (2019), they observed that performance measures are tools that help us to understand, manage and improve what organizations do. Performance refers to how well an organization has achieved its set objectives and goals for a given period. It is a powerful mechanism for prioritizing organizational goals and attaining them. Performance measurement acts as a surrogate for organization operations, functions and processes. Measurement of organizational performance is done to ensure employees are meeting objectives, staff are motivated, budget priorities are determined, comparison is done in relation to competitors' activities, individual and organizational objectives are aligned and plans for performance improvement are formulated among others. According to Ongeri and Osoro (2021) explained that measurement of performance should aid an organization in understanding and assessing worth received from employees and suppliers, value from stakeholders, how efficient procedures in an organization are, and strategic assets of an organization.

Research Methodology

A research design is the plan for selecting the sources and types of information to be used to answer the research question (Rahi, 2017). It is also described as a detailed outline of how an investigation will take place. The study adopted a descriptive research design. Descriptive research design is designed to obtain relevant and precise information concerning the current status of a problem or phenomenon and whenever possible to draw valid general conclusions from the facts discovered (Kothari, 2011). It describes the characteristics of the population under study and is concerned with the concept.

Reliability Test

Reliability is the extent to which results are consistent over time and are accurate representation of the total population under study (Crossman, 2020). Reliability of the research instrument was tested by use of Cronbach's alpha with an acceptance level of >.7 as guided by Castilio (2009) Reliability test results for the variables; supplier segmentation, supplier performance, supplier collaboration, supplier risk management and performance of private hospitals in Uasin Ghisu City County was .752; .861; .815 .723 and .840 respectively as shown in table 1.1 .All the variables recorded a Cronbach's alpha figure of >.7 which implies that internal consistency was adequate and the data can statistically be processed further.

| Table 1.1 Renubling Test | | | |
|----------------------------------|-------------------------|------|----------------|
| Variables | Cronbach's Alpha | N of | Items Comments |
| Supplier segmentation | .752 | 6 | Acceptable |
| Supplier performance | .861 | 6 | Acceptable |
| Supplier Collaboration | .815 | 6 | Acceptable |
| Supplier Risk Management | .723 | 6 | acceptable |
| Performance of private hospitals | .840 | 6 | Acceptable |
| | | | |

Table 1.1 Reliability Test

Supplier Segmentation

Respondents were requested to give their opinion on the variable Supplier segmentation. From table 1.2 , the respondents unanimously agreement that Supplier segmentation ensured

performance of private hospitals and periodic review in Private hospitals in Uasin Ghisu City County, Kenya viable with agreement of a mean was 3.372, and Standard Deviation of 1.067 Through their experience in Private hospitals in Uasin Ghisu City County the respondents gave neutral response with a mean of 3.531 and Standard Deviation of.9206 their skill has contribution to the quality and innovation of the supplier segmentation with strongly agree a Mean of 3.902, and Standard Deviation of .9055; level of education in Supplier segmentation it is important to put in place and maintain procurement the respondents gave a strongly agree with a Mean of 4.061, and Standard Deviation of . 7394; The management of Private hospitals in Uasin Ghisu City County, Kenya implements performance of West Pokot award the respondents disagreed with a Mean of 3.541 and SD=1.3018); and Supplier segmentation enhances performance of Private hospitals in Uasin Ghisu City County, Kenya, they agreed with a Mean of 3.566, Standard Deviation of .7015. This finding agrees with the findings of Nyile *et al.* (2022) who observed that clear description of Supplier segmentation, enhance effective performance of Private hospitals in Uasin Ghisu City County, Kenya.

| Statement | Mean | Std. Dev. | |
|---|-------|-----------|--|
| Uasin Ghisu County ensures their experience | | | |
| Sharing through Real time basis | 3.371 | 1.067 | |
| Private hospitals in Uasin Ghisu Kenya has | | | |
| been able to make decisions prudently | 3.531 | .9206 | |
| Level education has contribution to performance | | | |
| of Private hospitals in Uasin Ghisu, Kenya | 3.902 | .9055 | |
| frequent & accurate supplier risk management | | | |
| It is important to put in place Supplier segmentation | 4.061 | . 7394 | |
| The management of strategic evaluation in virtual | | | |
| integration | 3.541 | 1.3018 | |
| Supplier segmentation enhances performance | | | |
| of Private hospitals in Uasin Ghisu, Kenya. | 3.566 | .7015 | |

Table 1.2 : Supplier segmentation

Model of Goodness Fit

Regression analysis was used to establish the strengths of relationship between the performance of Private hospitals in Uasin Ghisu City County, Kenya (dependent variable) and the predicting variables; Supplier segmentation, supplier risk management, Supplier performance and Supplier collaboration (Independent variables). The results showed a correlation value (R) of 0.786 which depicts that there is a good linear dependence between the independent and dependent variables. This finding is in line with the findings of Ongeri and Osoro (2021). They observed that this also to depict the significance of the regression analysis done at 95% confidence level. This implies that the regression model is significant and can thus be used to evaluate the association between the dependent and independent variables. This finding is in line with the findings of Ittmann (2015), who observed that analysis of variance statistics examines the differences between group means and their associated procedures.

| R R2 Adjusted R | | Adjusted R | Std. Error of the Estimate | |
|-----------------|-------|------------|----------------------------|--|
| 0.796 | 0.721 | 0.733 | 0.064 | |

 Table 1.3: Model of Goodness Fit

a. Predictors: (constants); Supplier segmentation, Supplier risk management, ,Supplier performance and Supplier collaboration b. Dependent Variable: performance of private hospitals

With an R-squared of 0.721, the model shows that Supplier segmentation, supplier risk management, Supplier performance and Supplier collaboration an contribute up to 72.1% on performance of Private hospitals in Uasin Ghisu City County in while 27.9% this variation is explained by other indicators which are not inclusive in this study or model. A measure of goodness of fit synopses the discrepancy between observed values and the values anticipated under the model in question. This finding is in line with the findings of Mwakubo and Ikiara (2007).

Analysis of Variance (ANOVA)

From the results in table 1.4, analysis of variance statistics was conducted to determine the differences in the means of the dependent and independent variables to show whether a relationship exists between the two. The P-value of 0.005 implies that organizational performance of Private hospitals in Uasin Ghisu City County have a significant relationship with Supplier segmentation, supplier risk management, Supplier performance and supplier collaboration which is significant at 95 % level of significance.

| Model | Sum of Squares | Df | Mean Square | | F | Sig. |
|------------|----------------|-----|-------------|-------|------|------|
| Regression | 4.155 | 4 | 1.051 | 1.982 | .003 | |
| Residual | 6.465 | 135 | .530 | | | |
| Total | 10.610 | 139 | | | | |
| n | | | | | | |

Summary

In summary this study found that Private hospitals in Uasin Ghisu City County, Kenya through Supplier segmentation, supplier performance, supplier risk management, supplier collaboration on viable evaluation was able to improve performance of Private hospitals in Uasin Ghisu City County . The study also found that through Supplier segmentation the Uasin Gishi , Kenya has been able to make rational decisions on priority and non-priority evaluation Supplier segmentation has further contributed to quality and innovation of the planning team. By using Supplier segmentation and the implementation of strategic evaluation on performance of Private hospitals in Uasin Ghisu City County can lead to the prevention dispute resolutions. Supplier segmentation enhances Performance of Private hospitals in Uasin Ghisu City County, Kenya. That can be explained that clear description of processes and setting Supplier segmentation, suitable methods of using vital lessons from evaluating strategic 's goods, works or services, precise definition of roles evaluation team or committee 's knowledgeable enhance effective Supplier segmentation process. The study established that Private hospitals in Uasin Ghisu City County, Kenya, have proper Supplier segmentation in place. Early inspection of goods, works or services has resulted to cost reduction in supply chain practices.

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