STRATEGIC CAPACITY MANAGEMENT ON THE SERVICE QUALITY OF THE SHOPPING MALLS IN NAIROBI COUNTY, KENYA

BY

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UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

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BY

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Research Project Report Submitted to the School of Business in Partial Fulfilment of the Requirement for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SPRING 2019
STUDENT’S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: _____________________ Date: _____________________

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Supervisor’s declaration

This research project has been presented for examination with my approval as the appointed supervisor.

Signed: _____________________ Date: _____________________

Dr. Paul Katuse

Signed: _____________________ Date: _____________________

Dean, Chandaria School of Business
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ABSTRACT

The study sought to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, Kenya. The study focused on the following research questions: what is the effect of matching supply and demand on service quality among shopping malls in Nairobi?; how does forecasting future demand affect service quality among shopping malls in Nairobi?; and what are the capacity management strategies used by shopping malls in Nairobi? The study used descriptive research design to explain the variables of the study. The study targeted 1470 tenants in the major shopping malls based in Nairobi County.

Applying Slovene formula, the study engaged 94 tenants drawn purposively from various business form the respective shopping malls. A questionnaire was the key instrument for primary data collection which was administered using Survey Monkey procedure. Content analysis method was applied to analyze qualitative data obtained from the secondary sources. Inferential statistics such as percentages as well as descriptive statistics such as graphs and pie charts were used to analyse quantitative data obtained from the survey. Finally, the study used content and principle component analyses to extract predominant capacity management strategies used by shopping malls in Nairobi.

The study found that the shopping malls in the study area did not employ part time staff on part time basis during periods of increased demands. The study also found that shifting capacity majorly responded to quick clearance while contractors in service provision led to reduced complains and continuous service, whereas flexible staff helped in meeting service time. The Spearman’s correlation coefficients established a prima-facie evidence of a positive association between service quality and price differentiation, promoting off-peak demand, communicating with customers and subcontracting capacity. The study recommends that efforts must be geared towards enhancing pricing or cost effectiveness of their malls in order to increase the probability of service quality in the shopping malls. The management of the shopping malls should consider putting in place the recommended capacity management strategies (shifting, offloading and subcontracting) to even better its service quality.
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# ABBREVIATIONS AND ACRONYMS

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<tr>
<td>GLA</td>
<td>Gross Leasing Area</td>
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<tr>
<td>ICSC</td>
<td>International Council of Shopping Centers</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Problem
The rising business rivalry and changes in technology as well as changing business
environmental factors globally have forced firms to shift gears and becoming more focused
on the service quality offered to customers through strategic capacity management
approaches that are customer centric (Boer, 2013). According to Boer, strategic capacity
decision is in the middle of every product or service an organization produces or offers.
The quality of product or service offered depends heavily on the management of the
resources involved (Anderson, 2015). Whether in services or in manufacturing, capacity
management is at a broad level the same. However services have some unique decisions
especially where capacity is concerned (Crandall, 2014). Strategic capacity management is
amidst each service or product an organisation delivers or offers. No business activity can
occur without resources.

Capacity management involves decision making on planning, analysing and optimizing
capacity to satisfy demand in a timely manner and at a reasonable cost (Mieghem, 2013).
In addition, Harrison (2014) defined service quality as meeting the customer's needs in a
way that exceeds their expectations which can be objective or subjective. Objective quality
is the degree of compliance to a predetermined set of criteria while subjective quality is the
level of perceived value as reported by the person who benefits from a good or service.

Capacity management in service operations is divided into fixed and variable capacity.
Fixed capacity largely determines the maximum capacity of the service. The fixed
investments are normally significant and irreversible. They are often added in large discrete
units thus impossible to match exact capacity with demand and when to invest becomes a
critical decision. Variable capacity is related to the reallocation, rescheduling and/or
reconfiguration of tasks (Buxey, 2013). For example, buyback strategies are increasingly
being used as a capacity management practice to reduce excess fish harvesting capacity in
Japan, the United States, Canada, Norway, Australia, the European Community, and
Taiwan. Such strategies literally buy and removes vessels and/or licenses from a fleet to
decrease capacity. According to Jones and Kutsch (2017), service organizations use three
main capacity strategies use to manage demand i.e. level capacity, chase demand and coping demand management.

Strategic capacity management has a considerable impact on the quality of the service as perceived by customers. Capacity management decisions relates the potential output from the resources available to actual output which depends on service mix, the way capacity is managed and the extent of capacity gaps. According to Chase and Bowen (2015), aspects of strategic capacity management decisions are the extent of capacity change, speed and flexibility of that change. These changes in capacity management are intended to deal with rapid fluctuations in demand while ensuring consistency in quality of service delivered.

Shopping malls in Canada are significantly more productive on average, than shopping malls in the United States with average sales of $744 per square foot in Canada compared with US$466 per square foot in US as a result of better design and atmosphere (Flynn, 2015). Similarly, flexibility and responsiveness are the key drivers for Malaysian shopping malls (Newell, 2014). There’s a link between customer satisfaction, service excellence, and strategic capacity management in large ICT service organisations in South Africa (Marrone & Kolbe, 2015). More than 45% of organisations in South Africa are projected to use IT Strategic Management frameworks to deliver quality services. Chase capacity management strategy is the capacity management strategy mostly employed by most firms in Kenya (Mboya, 2014). According to Mboya (2014), capacity management strategies have a positive and significant effect on service quality in petroleum distribution sector in Kenya.

Nairobi has the highest number of shopping mall development hot-spots in East Africa and among the best in the region (Knight Frank, 2016). There are 20 major shopping malls located within Nairobi City County and it’s environ. Nairobi is said to have a mall space of close to 400,000sq meters (National Housing Corporation, 2016). Demand for the mall space has been indicated as shooting up with international brands entering into Kenya hence encouraging construction of more space in the city, as observed by Regnald, (2016). Large number of major shopping malls in Kenya are mostly located in the CBDs of Nairobi, Mombasa as well as Kisumu (Oxford Business Group, 2016). Other big towns like Eldoret and Nakuru have shown potential for larger development in the near future.

The quality of any service or product offered depends intensely on the management of the resources involved (Levis, 2014). Regardless of whether in manufacturing or in services
sector, delivering service quality in a firm is at an expansive level. However services have some unique decisions especially where capacity is concerned (Hayes, 2013). In services, the output must have an intangible element and it must be impossible to disconnect the production of a service from its consumption (Geng and Jiang, 2014). This is unlike manufacturing where the output is tangible and the production and consumption of goods can be easily separated (Modiano, 2015). Each service is unique, it is one-time generated, rendered and consumed, can never be exactly repeated and cannot be stored for future use as services have little or no tangible components. Whereas goods are standardized and produced in masses thus not unique and can be inventoried in alignment to market demand forecasts (Ward, 2015).

Due to the overlap in production and consumption, the strategic decisions involved in services operations are much more than is the case in manufacturing (Kathurai, 2013). The decisions on how much capacity to be made available are made at the same time as the decisions on how much capacity to utilize thus there is no possibility of producing the complete service package in advance of demand and holding it as an inventory (Lee, 2013). Strategic capacity management enables managers to plan ahead, to respond to business requirements speedily and to manage resources efficiently. It is part of a larger corporate strategy which is a long term plan to achieve a certain target (Jones and Kutsch, 2013). Operations managers will either succeed or fail in the process of balancing quality of service and resource management, depending on their skill in managing capacity to match demand (Kutsch, 2013).

In addition, in service operations, strategic capacity management basically looks at striking a balance between capacity of service delivery and the customer demand aimed at lowering waste of time and minimizing idle space or intellect (human resource) with the aim of reducing operating costs while increasing the quality of service delivered (Pullman, 2014). A firm’s strategic capacity management has a significant impact on customer satisfaction especially across shopping malls and industries engaged in merchandising business (Gronholdt, 2015). Indeed in a competitive market, increased level of service quality to customers is a milestone in differentiation and a strategic business positioning (Koole, 2013). Bloemer (2013) points out that an effective capacity management of a supermarket significantly improves perceived service quality. Equally, the significance of customer
buying behavior has been a key factor to be considered by the retailers in the present business environment.

Shopping malls in United Kingdom are spending a lot in research to understand the customer needs and how to eventually increase their level of service quality (Silva, 2015). According to Silva, the service delivery process of a shopping mall should be characterized with a number of strategic capacity approaches like faster and convenient service delivery to the customer and this has stood out as key factor of strategic competition. Reiner (2013) posits that adoption of a flexible capacity management strategies in any business is critical to develop a winning approach in attaining a strategic lead time performance with the aim of minimizing operating costs (Gants et al., 2014).

The growth of shopping malls in Kenya over the last decade can be described as having been tremendous (Mathooko, 2014). However, with the growth and expansion of shopping malls in virtually every major road from the Nairobi Central Business District (NCBD), means the business environment has continually changed, bringing more and more challenges to the players due to the new entrants into the sector as well as from emerging smaller supermarkets and business units that offer similar products and services that are offered by the shopping malls (Mathooko, 2014). Bethwell (2014) contends that shopping malls and other service providers encounter several issues among them service quality and production capability. According to the International Council of Shopping Centers (ICSC, 2015) a shopping mall is a closed shopping center with shopping streets and alleys which has a Gross Leasing Area (GLA) of between 400,000 to 800,000 square feet for Super Regional Malls.

1.2 Statement of the Problem

Shopping malls are compelled to discover new reason for rivalry and they need to enhance the nature of their services through strategic capacity management (Onyango, 2015). The endeavour to improve service quality among shopping malls in Nairobi County has been seen through ample parking space, restaurants, increased staff training, better profiling of service staff in terms of minimum academic and professional qualifications, unique shopper programmes, ambience, staff fitted with branded uniforms, branding and lighting to improve service delivery (Silva, 2014). However, strategic capacity management practices in use among the shopping malls in Nairobi are still at their underlying phases of execution and along these lines should be fortified to help strengthen their impacts on improving the
nature of services provided (Nzuki, 2015; Waweru, 2014; Kariithe, 2015 & Waita, 2013). Inadequate capacity decision can lead to the loss of the customer and business, excess capacity can drain the company's resources and prevent investments into more lucrative ventures (Kariithe, 2014).

In addition, available studies conducted in Kenya did not address issues relating to strategic capacity management and its effect on service quality among the shopping, malls in Kenya. A study done by Glyn and Bradly (2014), looked at a Brownian motion approximation to determine the optimal control of stock and capacity management in a make-to-stock process with an outsourcing option. Further, Alp and Tan (2013) researched on the combined capacity management plus inventory management shortcomings of a make-to-stock system. In addition Armistead and Clark (2015) examined the coping capacity management strategy in service industry. The focused on capacity management in services and its influence on quality and productivity performance. Locally, Ochieng' (2013) did an investigation on capacity management strategies: a case of Kenya Airways while Ong’ondo (2014) conducted a study on effect of capacity management strategies on service quality in Safaricom. These studies did not focus on the key aspects relating to strategic capacity management and its effect on service quality among the shopping, malls in Kenya and hence the motivation behind the present study to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, Kenya.

1.3 Purpose of the Study
The purpose of this study was to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, Kenya.

1.4 Research Questions
The following research questions guided the study:-

1.4.1 What is the effect of matching supply with demand on service quality of the shopping malls in Nairobi?

1.4.2 How does forecasting future demand affect service quality of the shopping malls in Nairobi?

1.4.3 What are the capacity management strategies used by shopping malls in Nairobi?
1.5 Significance of the Study

1.5.1 Managers of Shopping Malls
The findings of the study may enable the owners and management of the various shopping malls to identify the key factors to consider in service delivery in achieving optimal utilization of shareholders’ funds and resources. The shopping malls can then reallocate capacity as necessary and monitor the impact which can save them money on previously wasted resources. The study may also help them to manage demand according to business priorities, so they can make sure that certain critical processes always have enough capacity to run effectively. The results of the study may help them develop a long-term strategy for the business by documenting both the levels of current utilization and forecasted requirements.

1.5.2 Customers in Shopping Malls
The study may help tenants of the shopping malls demand the right quality of service to guarantee their satisfaction from the service they receive and make appropriate decisions on their choice of service provider.

1.5.3 Researchers and Academicians
The findings of the study adds to literature on the subject and may be an ideal reference material on the study of effects of capacity management strategies on service quality. The study is useful in enriching the body of knowledge and also helping future studies in carrying out further and related studies in strategic capacity management as this study forms basis of further research from the recommendations made for further studies.

1.5.4 Policy Makers
The findings of this study gives policy makers a glimpse of how strategic capacity management affects the level of service quality and customer satisfaction in Kenya and consequently identify mechanism that can be harnessed by the regulators to achieve improved performance of private sector organizations which is a critical blue print for the economic growth and development in Kenya.

1.6 Scope of the Study
The study sought to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, Kenya. Focusing on management perception, the target population of the study was the 1470 tenants in the major shopping
malls located in Nairobi County as per the Nairobi City County Licensing Department (Appendix D). The primary study was undertaken in the months of October and November, 2018. The study used primary data whereby a questionnaire was administered to collect data from the tenants of the target shopping malls. The study took a period of 3 months to be concluded after seeking permission letter from the tenants of the sampled shopping malls.

1.7 Definitions of Key Terms

1.7.1 Level Capacity Strategy: the organisation produces at a constant rate of output ignoring any changes or fluctuations in customer demand levels (Brian, 2015).

1.7.2 Chase Capacity Strategy: implies matching demand and capacity period by period (Chase and Aquilano, 2013).

1.7.3 Coping Capacity Strategy: the ability of people, organizations and systems, to use available skills and resources, to manage adverse conditions, risk or disasters. (Williamson, 2013).

1.7.4 Capacity Management: is the management of the limits of an organization's resources, such as its labor force, manufacturing and office space, technology and equipment, raw materials, and inventory (Dreker, 2014).

1.7.5 Strategic Capacity: to determine the overall capacity level of capital intensive resources; facilities, equipment, and overall labor force size that best supports the company's long-range competitive strategy (Coulter, 2014).

1.7.6 Shopping Mall: is a modern term for a form of a shopping center, in which one or more buildings form a complex of shops representing merchandisers with interconnecting walkways that enable customers to walk from unit to unit (Robinson, 2015).

1.8 Chapter Summary

The study aimed to examine the influence of strategic capacity management on the service quality among the shopping malls in Nairobi County based on the following research questions: what is the effect of matching supply and demand on service quality among shopping malls in Nairobi?; how does forecasting future demand affect service quality among shopping malls in Nairobi?; and what are the capacity management strategies used
by shopping malls in Nairobi? Chapter one has clearly shown that very few studies have been conducted on strategic capacity management and service quality especially among shopping malls in Kenya. The problem statement identified that the existing literature did not address issues relating to strategic capacity management and its effect on service quality among the shopping, malls in Kenya hence the motivation for the present topic. The study used explanatory research design to explain the research variables. The work took a period of four (4) months to be concluded (October–February, 2018).

Chapter two reviewed the literature on the influence of strategic capacity management on the service quality. Chapter three described the methodology, research design, and analysis strategy. In addition, the methods for ensuring validity and reliability were discussed in chapter three. Chapter four presented the primary data on: the effect of matching supply and demand on service quality; the effect of forecasting future demand on service quality; and capacity management strategies used by shopping malls in Nairobi County. Chapter five discussed the results and revealed how they relate to the existing literature. The chapter also presented answers to the research questions in the form of a set of guidelines and implications.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
Chapter two basically examined the influence of strategic capacity management on the service quality among the shopping malls in view of the specific research objectives. The chapter presents hypothetical writing in view of the autonomous factors and lastly synopsis of the literature review.

2.2 Matching Supply and Demand Effects on Service Quality

2.2.1 Price Differentiation
A common response during slow demand is to discount the price of the service. This strategy relies on basic economics of supply and demand (Ankitta, 2014). To be effective, however, a price differentiation strategy depends on solid understanding of customer price sensitivity and demand curves (Kivamba, 2013). For example, Kivamba posits that business travellers are far less price sensitive than are families traveling for pleasure. For any hotel, airline, restaurant or other service establishment all of the capacity could be filled with customers if the price were low enough. According to Geoffrey (2014), the goal is always to ensure the highest level of capacity utilization without sacrificing profits. Heavy use of price differentiation to manage demand can be a risky strategy.

Chandana (2013) averred that over reliance on price can result in price wars in an industry where eventually all competitors suffer. For example, price wars are well known in the airline industry. In airline industry the total industry profits suffer more often as a result of airlines simultaneously trying to attract customers through price discounting (Patel, 2015). Another risk of relying on price is that customers grow accustomed to the lower price and expect to get the same deal the next time they use the service (Mwandiku, 2013). According to Mwandiku, if communications with customers are unclear, customers may not understand the reasons for the discounts and they will expect to pay the same during peak demand periods.

Overuse or exclusive use of price as a strategy for managing demand is also risky due to potential impact on the organization’s image and the possibility of attracting undesired market segments. Maccini (2014) studied the effects of inventory dynamics and capital on
pricing and capacity decisions from a macroeconomic perspective. The study found that excess capacity tends to cause prices to decrease below their acceptable long run levels. In a later study done by Gaimon (2016) showed that upgrading capacity lowers the firm’s per unit production cost and thus the prices it charges. Further, Li (2013) introduced a point process model of a production firm with intensities parameterized by production, capacity and price, respectively. A distinction was made between static decision making when capacity levels are set at time zero, and dynamic operating decisions (i.e. pricing and production). In addition Van Mieghem and Dada (2014) studied different possible postponement strategies in a single period problem when firms make three decisions: capacity investment, production (inventory) quantity, and price. The findings showed a significant relationship between demand management and pricing differentiations.

2.2.2 Promoting Off Peak Demand

During off-seasons holiday resorts use their premises as retreat location for business or professional groups (Aviv, 2013). In the same way in order to encourage long distance dialling the Telephone companies offer lower rates at night (Dong, 2015). According to Dong, most service managers wrestle constantly with ideas to increase volume during periods of low demand, especially in those facilities with a high-fixed, low-variable cost structure. The impact of those incremental revenue dollars on the profitability of the business is tremendous (Bitran, 2014). Examples of attempts to develop off-peak demand are seen in Hamburger chains add breakfast items to their menus, and coffee shops add dinners to theirs (Kouvelis, 2015). Urban hotels, which cater to the business traveller during the week, develop weekend “minivacation” packages for the suburban population in their geographic areas, while resort hotels, jammed with pleasure travellers during school vacations, develop special packages for business groups during off-seasons (Gallego, 2014).

However, caution must be used in developing plans to increase demand for the underused periods of the service facility (Jasper, 2014). Many companies have made costly mistakes by introducing such schemes and not seeing the impact they would have on existing operations (Willey, 2015). As Wickham (2015) has stated, for manufacturing companies, there are some real costs associated with “unfocusing” the service delivery system, which is exactly what market-expanding activities have a tendency to do. New concepts often require equipment and skills not currently found in a service delivery system. The addition
of these skills and equipment may require a new type of labor force, a new layout, or more supervision. Even if the new concept succeeds in creating demand in off-peak periods, the effects are not always positive. Managers often use slack time productively as a time to train new employees, do maintenance on the equipment, clean the premises, prepare for the next peak, and give the workers some relief from the frantic pace of the peak periods.

A new concept, therefore, may have a tendency to reduce the efficiency of the present system at best, or, at worst, to destroy the delicate balance found in most service delivery systems. Research indicates that the influence of factors such as technology, demographics and lifestyle patterns will dramatically alter the services industry in the new Millennium (Goeldner, 2014). Socio-demographic changes and a higher spending power have also created a change in shoppers' values (Halland & Wailer, 2013). According to Pearce (2015), the future trends for customers seem to suggest that shoppers will be especially concerned with not just being “there”, but with participating, learning and experiencing the place they visit. A service cannot be stored for future consumption, this constitutes one of the unique features of services, referred to as perishability (Lovelock, 2014).

In addition to the inability to store services, managers are also faced with the challenge of continuous fluctuation in demand (Marsha, 2015). For example Ryan (2013) observed that seasonality may produce fluctuation in demand at a ski resort between winter and summer; a fluctuation in occupancy in a city centre hotel during weekdays and weekends, the fluctuation in demand at a restaurant during breakfast, lunch and dinner hours to the rest of the day, the fluctuation of demand for travel facilities during certain times of the day. While the consumption of tangible goods may be delayed for future consumption and/or inspection of quality, services are generally produced and consumed almost simultaneously (Carmen & Langeard, 2013). These differences render the delivery system and quality control systems utilised in the product industry, inappropriate in to services (George, 2013). Operations managers in the services sector are thus required to consider alternative strategies to facilitate the efficient management of both demand and capacity (supply) of services (Amico, 2015).

2.2.3 Communicating with the Customers
A study conducted by Levin (2013) found that forewarning customers about busy times and possible waits can have added benefits. Many customer service phone lines provide a similar warning by informing waiting customers of approximately how long it will be until
they are served (Liu, 2014). Liu argues that customers who don’t want to wait may choose to call back later when the lines are less busy. Research done by Talluri (2013) in a bank context found that customers who were forewarned about the bank’s busiest hours were more satisfied even when they had to wait than were customers who were not forewarned. In addition to signage communicating peak demand times to customers, advertising and other forms of promotion can emphasize different service benefits during peak and slow periods (Welter, 2015). According to Welter, advertising and sales messages can also remind customers about peak demand times.

What makes service industries so distinct from manufacturing ones is their immediacy (Zhang, 2013). Zhang states that the hamburgers have to be hot, the motel rooms exactly where the sleepy travellers want them, and the airline seats empty when the customers want to fly. Balancing the supply and demand sides of a service industry is not easy, and whether a manager does it well or not will, Sasser (2014) argues, make all the difference. Teemu (2013) posits that, unlike the goods manufacturing industry, service organisations are unable to increase the supply in accordance with the increase in demand. When the demand for a service is higher than the firm's capacity, the firm effectively loses its chance to serve those customers (Stevenson, 2015). Similarly, when the demand is less than capacity, the firm loses revenue owing to unused resources.

According to Sofronis (2013) given that capacity is a fixed component, the only viable option for the service manager is to seek capacity management strategies that assist them to influence demand, strategies which can induce customers to voluntarily alter their demand. In addition, excess capacity or low demand will not only impair the firm's profit, but will also affect the quality of service experienced by customers (Rudberg, 2014). For example, a near empty cruise liner not only loses money, but will also fail to provide its passengers with an important service element of travel experience, namely, the social ambience that is created in the presence of fellow passengers (Bitner, 2015).

Bitner (2015) averred that a shopping mall that fails to provide social ambience will be considered less satisfactory by the customers. Social ambience which negatively influences customers may very well influence service employees’ interaction with the customers. In addition, for those people in the organisation, especially those who have direct contact with the customer (Bagshaw, 2013). The effective management of capacity thus has a considerable impact on the quality of service perceived by the customer (Clark, 2013). On
the other hand, if the firm were to adopt a strategy to utilise excess demand by continually operating at above optimum or near full capacity, it would expose the organisation to long-term risks of deterioration in the quality of service (Hesket, 2015).

Martinez (2014) reported a study in a restaurant where the perception of service quality increased up to 75 per cent utilisation of capacity and fell sharply beyond that point. However, perception of service quality deteriorates if service firms operate below 40 per cent capacity (Hesket, 2015). A number of previous researchers have indicated the importance of managing supply and demand in services to ensure quality of service (Sasser, 2013; Rhyne, 2014; Chase and Bowen, 2015; Lovelock, 2016; Armistead & Clark, 2015).

According to Rudberg and West (2013), strategic capacity management has a considerable impact on the quality of the service as perceived by customers. Capacity decisions relate the potential output from the resources available to actual output which depends on service mix, the way capacity is managed and the extent of capacity gaps.

Chase and Bowen (2015) argued that aspects of capacity decisions are the extent of capacity change, speed and flexibility of that change. These changes in capacity are intended to deal with rapid fluctuations in demand while ensuring consistency in quality of service delivered. Mwangangi (2016) did a study on the effect of capacity management on the quality of service in the petroleum distribution sector. The study noted that in service operations, capacity management is concerned with balancing the capacity of the service delivery system and the demand from customers to minimize customer waiting time and to avoid idle capacity. The objectives to achieve are minimal operating costs and service quality. Participation of the customers in the service delivery process and the nature of services limit the standard options that are available for matching supply with demand (Buxey, 2013). According to Buxey, since capacity is part of the product, decisions on how much capacity to make available are made at the same time as the decision on how to utilize the capacity. Buxey (2013) averred that the effect of this is that capacity decisions significantly influence service quality as perceived by the customer.

### 2.3 Forecasting Future Demand Effects on Service Quality

In capacity management, forecasting is a technique which involves prediction of sales (demand) for individual products (Shan, 2014). Shan argues that forecasting is a difficult task and a spot-on forecast is practically impossible. However, a carefully executed prediction assessments guarantee a better quality and facilitate capacity planning.
(Aquilano, 2013). The methods of forecasting should seek improvement at all times as the activity is vital and significant during management decisions. According to Beamer (2014) forecasting models can be split into two main groups: Qualitative and quantitative. In operations management literature, qualitative forecasting is occasionally referred to as judgmental forecasting. Furthermore, as forecasting is an art of thorough research and the variety of approach methods is in vast number (Jacobs & Chase, 2014).

2.3.1 Timing and Location of the Service
A recent study conducted Meissner (2016) noted that some firms adjust their hours and days of service delivery to more directly reflect customer demand. According to Debo (2014), historically, U.S. banks were open only during “bankers’ hours” from 10 A.M. to 3 P.M. every weekday. Debo contends that obviously these hours did not match the times when most people preferred to do their personal banking. Now U.S. banks open early, stay open until 6 P.M. many days, and are open on Saturdays, better reflecting customer demand patterns (Whitney, 2013). Theaters also accommodate customer schedules by offering matinees on weekends and holidays when people are free during the day for entertainment (Birbil, 2014). Movie theaters are sometimes rented during weekdays by business groups. According to Birbil, this is an example of varying the service offering during a period of low demand.

Service capacity management is seen as more complex than that of manufacturing (Grall, 2014). Grall posited that as service capacity depends more on the timing and location of the service, the volatility of demand fluctuation is greater when compared to production capacity planning. According to Corsten (2015), in goods manufacturing, the traditional mode is adjusting the logistics and operations management to their full potential through reduction of throughput time. Ideally, organizations would be able to reduce capacity during seasonal lows and increase during peaks. However, this is virtually impossible for services with the exceptions of providers which operate through appointments (Stuhlmann, 2015).

There are plenty of characteristics which set service capacity management apart from the manufacturing. (Corsten & Stuhlmann, 2015). In a service setting, the capacity must be situated near the customer as many of the services cannot be performed without the presence of the consumer. Manufacturers have the advantage of producing the good which is then distributed to the client (Wong, 2013). Wong argued that this practice is not possible
for service sector. The capacity to deliver the service has to be distributed before the actual production can begin. The delivery is not necessarily physically executed but such mediums as telephone and internet can provide services (Tan, 2013). This trend has reduced the location-dependency for such service firms as banks and telephone companies. (Jacobs, 2014).

The volatility of demand is portrayed as being of different scale for service capacity than what is for manufacturing capacity. As observed by Corsten (2015) the inability to hold stock of services leads to the situation where an organization has to have the right amount of capacity at the given time at the exact location. Otherwise, a loss in sales (too little capacity) or unused capacity (too much) will occur decreasing the profitability. The task of inventory is to smooth the demand and this is the case for manufacturing whereas impossible in service sector (Kotter, 2014). The great variation in demand set large deviation to the minimum capacity needed. Kotter argues that customers wanting service tend to have individual demands and different needs which require substandard amount of capacity. An example of the situation could be a dentist drilling a patient’s cavity which proves to be bigger than what the check-up had insisted (Rohleder, 2013). According to Rohleder, the dentist had an idea of how long the fixing would take, but now he finds himself in a situation where he has to spend extra capacity because of the sudden change of need hence making the next patient having to spend more time in the waiting room.

Moreover, consumer behaviour plays a key role in the volatility of service demand (Kothari, 2014). As customer behaviour is affected by numerous external factors (fashion, weather, major event) the effect is direct. For example in Cambridge people have less interest to go punting when it’s raining as opposed to a nice sunny summer day (Jihnston, 2013). Taking into consideration the sensitive volatility, service managers are recommended to plan capacity increments even at a minute scale of 10 to 30 minutes (Corsten & Stuhlmann 2015; Jacobs & Chase, 2014).

2.3.2 Developing Complementary Services

According to Ben (2014), one approach in developing complementary services is to change the nature of the service offering, depending on the season of the year, day of the week, or time of day. For example, Nemirovski (2015) found that Whistler Mountain, a ski resort in Vancouver, Canada, offers its facilities for executive development and training programs during the summer when snow skiing is not possible. Further, Patrick (2013) found that a
hospital in the Los Angeles area rents use of its facilities to film production crews who need realistic hospital settings for movies or TV shows. In addition, accounting firms focus on tax preparation late in the year and until April when federal taxes are due in the United States. During other times of the year they can focus on audits and general consulting activities (Westlife, 2014). According to Wolf (2014), air lines even change the configuration of their plane seating to match the demand from different market segments. Wolf argues that in some planes there may be no first-class section at all. On routes with a large demand for first-class seating, a significant proportion of seats may be placed in first class.

However, Leonard (2015) posits that care should be exercised in implementing strategies to change the service offering. Because such changes may easily imply and require alterations. Other marketing mix variables are promotion, pricing and staffing to match the new offering (Kim, 2014). According to Kim, unless these additional mix variables are altered effectively to support the offering, the strategy may not work. Even when done well, the downside of such changes can be a confusion in the organization’s image from the customers’ perspective or a loss of strategic focus for the organization and its employees (Washington, 2013).

A study done by Simson (2015) averred that managers shift demand away from peak periods by developing complementary services, which either attracts consumers away from bottleneck operations at peak times or provides them with an alternative service while they are in the queue for the capacity-restricted operations. According to Werner (2014), restaurant owners have discovered that on busy nights most patrons complain less when sitting in a lounge with a cocktail than when standing in line as they wait for tables in the dining area. Also, the profitability of restaurants with bars can more than double (Bailer, 2014). A diversion can also relieve waiting time (Zena, 2013). A study done by Michael (2014) found that a hotel manager had installed mirrors on each floor’s central lobby so that customers could check their appearance while they waited for the elevator. According to Michael, banking by mail or by automated tellers are other ways to cut down customer waiting time.

2.3.3 Creating Reservation Systems

A study conducted by Simion (2013) noted that service executives can effectively manage demand by employing a reservation system, which in essence presells the productive
capacity of the service delivery system. According to Jacob (2014), when certain time periods are booked at a particular service facility, managers can often deflect excess demand to other time slots at the same facility or to other facilities at the same company and thereby reduce waiting time substantially and, in some cases, guarantee the customer service. For instance, Were (2015) posits that if a motel chain has a national reservation system, the clerk can usually find a customer a room in another motel of the chain in a fairly close proximity to his or her desired location if the first-choice motel is full.

In a similar manner, airlines are often able to deflect demand from booked flights to those with excess capacity or from coach demand to first class, especially if their competitors do not have seats available at the consumers’ desired flight time (Branson, 2013). However, Branson contends that reservation systems are not without their problems, the major one being “no-shows.” Consumers often make reservations they do not use, and, in many cases, the consumer is not financially responsible for the failure to honor the reservation (Walker, 2014). To account for no-shows, some service companies oversell their capacity and run the risk of incurring the wrath of customers (Nader, 2015). In addition, Ralph (2014) posit that many service companies have made it a policy to bill for capacity reserved but not used if the reservation is not cancelled prior to a designated time.

2.4 Capacity Management Strategies on Service Quality

Capacity management is in the middle of every product or service an organization offers (Kutsch, 2015). Kutsch posits that no business activity can take place without resources. The quality of product or service offered depends heavily on the management of the resources involved. Capacity management is concerned with matching the capacity of the operating system and the demand placed on that system (Coshall, 2014). Capacity decisions are generally strategic involving investments and therefore commitment in resources such as equipment, buildings and manpower. In light of this factor, capacity decisions affect greatly into a myriad of organizational functionality (Geng, 2013). Greenland (2014) averred that these decisions have an enormous impact on the ability to meet the future demands for the services an organization is offering.

In addition, Cooper (2013) observed that costs are widely influenced by capacity decision as operating costs are larger when there are investments in resources. According to Cooper, the initial cost of the service is determined by the unit cost which is normally a direct derivation from the costs of the capacity used. Other areas which are affected are the ease
of management; better capacity, easier to manage, and competitiveness of the company (Jiang, 2014). Coming to the 21st century, globalization has added its share into the capacity decision mix by highlighting the importance as the markets and competitors are operating in a global scale and increasing the complexity. All these reasons emphasize the need to plan these crucial choices in advance (Kersteins, 2015). Managing supply to fit demand or demand to fit supply is prompted as one of the key issues of service management practice. According to Jones and Kutsch (2014), there are three main capacity management strategies which include level, chase and coping strategy. Jones argue that each of these strategies should be adopted when its advantages outweigh the disadvantages. Often shopping malls have to opt a mixed capacity strategy as it is very hard to forecast demand and balance existing capacity (Kutsch, 2014).

2.4.1 Level Capacity Strategy

In level capacity strategy, the capacity is maintained at a constant level all along the planning period and any fluctuations in demand are ignored (Klassen, 2013). High underutilization of resources can make this capacity option very expensive but also very useful where the opportunity cost of single lost sale is very high (Geng and Jiang, 2013). In service organizations like banks there is always a possibility of a large number of members coming in any time and very low number of members in off-peak season resulting in either a waiting line or underutilization thus a pure level capacity plan would not be suitable (Chandran, 2013). According to Chandran, operations managers in shopping malls should use capacity management to minimise the trade-off between resource productivity and service quality.

Service quality and resource productivity are important in the strategy context as they impinge on the ability of the service organisation to attain its competitive strategy described by a combination of perceived added value (by the customer) and price (Bowman 2015). Service quality and customer satisfaction is aligned to perceived added value for the customer and resource productivity and unit costs affect prices and profitability. The emphasis towards either service quality or efficiency will to a large extent be driven by the competitive position of the service company (Clark, 2014). Clark posited that if competitive advantage is gained through service quality at a high price (compared to competitors) there will be more latitude in the trade off resource productivity in this pursuit and hence a tendency to indulge in capacity redundancy at times.
Bobbie (2014) averred that if service business is competing more on price the resource productivity is more likely to take precedence over service quality, which may be allowed to fall in the area of absolute service quality and customer satisfaction. However Sasser (2014), argued that with increasing customer expectations of service quality, service organisations are being forced to maintain higher levels of service at lower prices in times of recession and price wars than perhaps has been the case when demand has been higher than supply. Also many services, notably in banking, hotels, and airlines, are no longer gaining clear competitive advantage from the provision of certain levels of quality as these are now regarded as a norm for the industry to which all providers in a competitive group must aspire (Rosen, 2013). Rosen argues that reducing service quality as part of a trade-off against resource productivity is less well definite. According to Rosen, a much greater sophistication is required which can allow the less visible aspects of quality to be reduced, thereby keeping the whole service delivery process under far greater control. This in turn requires an understanding of the capability of a given level of capacity to deliver different dimensions of service quality. The trick, it would seem, is to make sure that capacity is provided to support the critical dimensions of service quality (Canel, 2013).

The critical dimensions are usually the dimensions which win customers or those which if they deteriorate too much lead to loss of customers (Armistead 2015). According to Armistead, the elements of resource productivity which are important are resource utilisation, input costs, and efficiency related to doing things right first time and throughput time. Hootegem (2014) noted that the range of elements which make up service quality management may be summarised for present purposes into four categories, absolute perceived quality, “right first time”, holding to specification, and customer satisfaction. According to Hootegem, poor service providers are likely to be often out of control of their capacity and either fail to satisfy demand or maintain excessive inefficiencies. Good service providers will struggle to deal with the two extremes of when a chase strategy runs out of capacity and becomes level and when demand drops away from effective capacity so that resource productivity drops (Anderson, 2013).

2.4.2 Chase Capacity Strategy
Chase strategy tries to match the capacity levels according to the changing demand patterns (Lee, 2013). To actualize the strategy flexible working hours, different number of staff and often different number of equipment in each period is required. It is suitable for companies
which produce either perishable goods or cannot store their outputs such as customer processing (Wirtz, 2014). According to Wirtz, Chase strategy has a clear advantage of having the appropriate level of staff all the time according to the demand of a particular season. This strategy requires adjustment of capacity through different means like offering over time in peak and lesser hours in off-peak periods, varying number of employees according to the seasonal requirements, part time contracts and subcontracting (Welch, 2015).

In this strategy the number of employees would need to be rescheduled to increase the current service levels (Patrick, 2014). Developing a new facility will also chase the increase in demand which is expected due to new businesses down town. However, the hire and layoff of employees has some cost implications which according to Banjoko (2013), include recruitment costs involving screening, selection and training; layoff cost which include severity pay; other associated costs of realigning the workforce and the intangible cost of low worker morale. In most cases using this strategy can result in higher employee turnover rate which often leads to apprehensive and displeased employees (Marshal, 2013). In addition, the use of overtime\slack time is a more useful approach to changing capacity to meet demand. Sometimes, overtime may result in lower productivity, poorer service quality, more accidents, and increased payroll costs (Banjoko, 2013). On the other hand, slack or idle time results in less efficient use of machines and other fixed assets (Patrick, 2014).

To overcome layoffs especially where company policy is against layoffs, slack time programs can be initiated by stimulating new demand for products or services that require the same production processes in utilizing the excess capacity (Monaghan, 2013). Typically, chase capacity decision is to cope with the customer demand through varying capacity at a given period depending on demand at that period (Sahu, 2014). This strategy basically, is to optimize the gap between capacity and demand: minimize the capacity when the demand is low, maximize the capacity when the demand is high. This set capacity is to deliberately lag demand, using backlog and long quoted lead times to buffer capacity changes (Peter, 2013). According to Peter, the major advantage of a chase strategy is that it allows inventory to be held to the lowest level possible, and for some firms, this is a considerable saving. Most firms embracing the just-in-time production concept utilize a chase strategy approach (Chopra, 2014).
2.4.3 Coping Capacity Strategy

The objective of coping capacity strategy is to shift the burden of peak period to off-peak period (Ohno, 2015). Either the demand is changed through various methods or alternate products or services are offered to fill off-peak capacity. The most widely applied method in service industry is pricing to shift the peak demand to off-peak when people are not very interested in buying (Kemal, 2013). According to Kemal, advertising also helps to smooth demand but is expensive and if unplanned can result in financial loss. Organizations with different demand patterns develop new products and services covering the whole year (Mieghem, 2013). It is proposed that service organizations should either slightly rise prices during the peak times or provide services which cost lesser to manage demand.

The concept of a coping strategy for managing service resources has a particular link to service quality (Hart, 2015) and unconditional service guarantees (Bethwell, 2014). There is growing evidence from these areas of literature that service organisations which are already good at delivering a consistent level of customer service quality are seeking to improve and differentiate themselves from their competitors by being able to respond quickly and effectively when things go wrong (Martines, 2014). Hence the overall level of service quality is not diminished and if there are unconditional guarantees these can be delivered without giving away the store (Glueck, 2013). According to Glueck, to achieve these results, operations managers requires a greater understanding of what is required to satisfy customers and to control the operation. Armistead (2914) has proposed the importance of an understanding of the service operations task as an instrument for translating service strategy into a service delivery system which is capable of achieving the goals of the strategy.

Larsson and Bowen (2014) suggested that different types of service present service operations managers with a different operational focus. Their mode addresses aspects of uncertainty in demand, first in the mix of services required like diversity of demand, and second in the nature of demand related to customers’ willingness to participate. This matrix is similar to that proposed by Maister and Lovelock (2013) or standardised and customised services producing added value mainly in either the front office or the back room. Coping in service will be reduced if the basics of service can be carried out (Wailer, 2013). Preventative maintenance, which can be scheduled accurately, reduces the incidence of failures. Execution of fault free work when breakdown does occur and carried out at the
first visit will also reduce the incidence of false alarms (Donna, 2015). When demand is running close to capacity and coping takes place and there will be a fall in the response time and the possibility of rushed service with mistakes being made (Nigro, 2013).

According to Nigro, a vicious circle is set up of more coping leading to less time for preventative maintenance and hence more failures. The effects may be reduced by having comprehensive customer records of the system and of the key holders, by being able to schedule engineers’ real time, being able to maintain contact with them. The issue is concerned with how much can be spent to improve scheduling and customer records to control the fall in service with the present incidence of coping (Swaminathan, 2013). Williamson (2014) suggested that service managers are not good at managing capacity in relation to service quality. A coping capacity strategy is proposed as a way of augmenting the strategies of chase and level capacity management (Muteti, 2014). The coping action map is an attempt to present a way of developing coping strategies which recognise changing operational focus, capacity strategies and customer service quality dimensions within a total service delivery. It is not prescriptive in the development of coping strategies at each stage but it does allow the main coping issues or approaches to be identified (Harland, 2013).

2.5 Chapter Summary

In summary, the reviewed literature on capacity management strategies showed that the ability of a firm to effectively utilize its capacity to match customer demand is at the heart of the operations management task such that its success or failure directly influences the attainment of a competitive strategy delivering a mix of perceived added value and eventually customer level of satisfaction. The chase and level strategies of service organizations are in themselves inadequate to handle the limits of effective capacity and consequently the coping strategy has lately been presented as the additional tool on the basis of observations of operation managers in service organisations. In addition, the literature on capacity management strategies reveals that demand and capacity options impact on each other and identifies different approaches to capacity management strategies. Further a study by Cooper (2013) on the effect of capacity management strategies on service quality in Safaricom showed that implementation of capacity management strategies by Safaricom limited at its various retail outlets throughout Kenya enhanced the provider’s quality of service provision. The following chapter (chapter three) presents the
methods and techniques used to undertake the primary study aimed to address the four specific research objectives.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
The chapter was sorted out under the accompanying segments; research design, population and sampling procedure, data collection methods, research procedures, data analysis methods and chapter summary.

3.2 Research Design
The study adopted descriptive research design. Descriptive research design is a scientific method which involves observing and describing the behavior of a subject without influencing it in any way (Borg & Gall, 2013). Descriptive research design allows for gathering in-depth information that may be either quantitative (surveys) or qualitative (observations or case studies) in nature. This allows for a multifaceted approach to data collection and analysis (Oxley, 2014). Hence the motivation in applying descriptive design in this study. This was achieved by engaging the tenants of the shopping malls using a questionnaire as it was expected they had the necessary information to answer the study questions: what is the effect of matching supply and demand on service quality among shopping malls in Nairobi?; how does forecasting future demand affect service quality among shopping malls in Nairobi?; and what are the capacity management strategies used by shopping malls in Nairobi?

3.3 Population and Sampling

3.3.1 Population
Population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Martenes, 2012). The target population of the study was the 1470 tenants in the major shopping malls located in Nairobi County (Appendix D) (Nairobi City County Licensing Department, 2016). A shopping mall was herein defined as a modern one or more buildings that form a complex of shops representing merchandisers with interconnecting walkways that enable customers to walk from unit to unit, along with a parking area, a modern indoor version of the traditional market place (National Construction Authority, 2015). Nairobi City was of interest to this study because according to a report by Knight Frank titled, "The Shop Africa 2016 report, assessing Sub-
Saharan Africa’s retail markets", Nairobi leads the way for shopping malls in sub-Saharan Africa and this therefore was considered representative of the population.

3.3.2 Sampling Design and Sample Size

3.3.2.1 Sampling Frame

In statistics, sampling frame is the source material or device from which a sample is drawn (Mason, 2012). It is a list of all those within a population who can be sampled, and may include individuals, households or institutions. In this study, the participants were the tenants of the sampled shopping malls in the following business categories: restaurants, retail shops, pharmacies and entertainment zones.

3.3.2.2 Sampling Technique

The study respondents were drawn purposively to fill questionnaires. A purposive sample is where participants are selected based on the needs of the study (Wheelen, 2014). This implies that the researcher relied on own judgment when choosing members to participate in the study.

3.3.2.3 Sample Size

Sample size of a study refers to the number of units that are chosen from which data is gathered (Martens, 2012). Applying Slovene formula: \( \hat{N} = \frac{N}{(N \times d^2 + 1)} \) where; \( \hat{N} \) = sample size, \( N \) = total population; \( d = 1 \) = degree of confidence with a desired 90% degree of confidence, 94 participants were selected from the major shopping malls based in Nairobi. Slovene formula is a random sampling technique formula to estimate sampling size (Mason, 2012).

The sample size was calculated as follows:

\[
1470 / (1470 \times 0.12 + 1) = 93.63.
\]

The sample size was consistent with Hum (2015) who stated that, using too many participants in a study is expensive and exposes more number of subjects to procedure. This is amplified by another study conducted by Russel (2001) which found that a study should be of an adequate size relative to the objectives of the study. Russel argues that sample size
must be big enough that an effect of such magnitude as to be of scientific significance will also be statistically significant.

Table 3.1: Sample Size

<table>
<thead>
<tr>
<th>Categories</th>
<th>Population</th>
<th>Sample size</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business owners</td>
<td>21</td>
<td>21</td>
<td>22.3</td>
</tr>
<tr>
<td>Assistant managers</td>
<td>179</td>
<td>27</td>
<td>28.7</td>
</tr>
<tr>
<td>Supervisors</td>
<td>431</td>
<td>24</td>
<td>25.5</td>
</tr>
<tr>
<td>Subordinates.</td>
<td>839</td>
<td>22</td>
<td>23.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1470</strong></td>
<td><strong>94</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collection Methods

The study adopted a questionnaire as the key instrument for primary data collection. The use of questionnaire was preferred as it ensured confidentiality of the respondents was upheld during data collection process, it saved on time, and was easy to administer. This is in line with another study done by Newton (2015) which found that questionnaires provide a greater feeling of anonymity hence encouraging open responses to sensitive questions and is free from bias, guaranteeing accuracy and valid data. The questionnaire was ideal for this study because the author was able to collect information from a larger sample.

The questionnaire comprised of closed ended and open ended questions to elicit specific responses for quantitative and qualitative analysis respectively. Some of the closed ended questions required a response on a five point Likert scale, showing to what extent each independent variable contribute to service quality among the shopping malls. The questionnaire was organized into themes. The first theme of the questionnaire dealt with demographic characteristics such as gender, age, and number of years as a tenant of the respective shopping malls among others. The other sections focused on the questions based on the three research questions. The questionnaire was administered using SurveyMonkey process after obtaining consent from the tenants. SurveyMonkey is an online survey tool
used to capture the voices and opinions of people founded in 1999 by Ryan Finley (Biden, 2016).

3.5 Research Procedures
To ensure reliability and consistency of the research instrument, a pilot study was conducted using a random sample of 10 participants from the sampled shopping malls. Ten (10) participants for the pilot study were chosen based on Kathuri and Pals, (2013) suggestion that it is the smallest number that yields meaningful results in data analysis in a survey research. According to Sekeran (2013) a pilot test is necessary for testing the reliability of data collection instruments. In this study, piloting will be done in order to assess the suitability of questionnaire items and interview schedule, the wording of the questions and the consistency in the responses.

The findings of the pilot study revealed that 60% of the participants indicated that most Likert scale questions were not clear to them and this enabled the researcher to revise the questions. Further results from the pilot study indicated that only 2 out the 10 participants were not able to fill all the questions and this was a positive indication that the questionnaire was non ambiguous. 8 out of 10 participants said that the questions were relevant to the general objective of the study.

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3.5.1 Reliability Test
To determine the clarity of the questions and relevance of the questions and other errors that could affect reliability of the questionnaire, the pilot results were subjected to the split-half analysis technique according to Cronbach’s formula;

\[ \alpha = \frac{N \times r}{1 + (N-1) \times r} \]

Where \( N \) = number of items and \( r \) is the average inter-item correlation among the items.
The study used Cronbach alpha as the reliability coefficient of at least 0.7 which is accepted (Santos & Reynaldo 2013). A reliability coefficient of 0.9 was obtained from the pretest indicating that the questions used were non ambiguous, and relevant to the respondents.

### 3.5.2 Validity
Bozlu (2013) defined validity of data as the extent to which a test measures what it is supposed to measure. In the case of this study, the researcher applied face validity by asking participants to give their thoughts on the usefulness of the test. 8 out 10 participants said that they were confident that the questionnaire will lead to credible and relevant data. When asked whether the categories of respondents targeted will provide relevant information, 9 out of 10 agreed.

### 3.6 Data Analysis Methods
The present study assumed a mix of qualitative and quantitative approaches of research. As such, the study applied content analysis method to analyze the qualitative data obtained from the secondary sources. For the quantitative data to be obtained from the survey, the study used inferential as well as descriptive statistics to analyze and present the data. Descriptive measurements involved the use of frequency distribution tables, cross tabulations, bar graphs and figures to analyze and present the data (Ansoff, 2013). The inferential statistics included Chi-Square tests, standard deviations and correlations. This was achieved through the help of Statistical Package for the Social Sciences (SPSS) to produce descriptive and inferential statistics for the study.

### 3.7 Chapter Summary
Chapter three has covered the methods used to carry out this study. The study used explanatory research design to explain the variables of the study in a detailed manner. The target population was 1470 tenants from the major shopping malls based in Nairobi County whereby the study applied Slovene formula with a desired 90% degree of confidence to come up with a sample size of 94 participants. The study used a questionnaire as the key instrument for primary data collection. The study eliminated all biases and limitations appropriately and accordingly by conducting a pilot study. Content analysis method was applied to analyze qualitative data obtained from the secondary sources. While inferential as well as descriptive statistics were used to analyse quantitative data obtained from the survey. Finally, the study used content and principle component analyses to extract predominant capacity management strategies used by shopping malls in Nairobi.
The next chapter (chapter four) presents the primary findings and discussions on the literature reviewed in relation to the primary findings. The presentation of findings was discussed beginning with descriptive, then the inferential while interpreting the findings by comparing and contrasting with the literature reviewed.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
This chapter discusses research findings of the study which was aimed to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County. The chapter presents the analysis of the findings guided by questionnaire responses. The analyses was divided into the following sections: - first section analysed response rate; the second section presented respondents’ demographics while the third theme did a detailed analysis on the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County.

4.2 Response Rate
The 94 members sampled to take an interest in this examination, all were accessible and 94 questionnaires were controlled through a SurveyMonkey technique. 81 questionnaires were completed effectively and were usable for investigation. When there is a difference in total returned versus usable questionnaires, researchers should utilise the number of usable questionnaires as the numerator in calculating response rate. Therefore, the response rate for this research was 86%.

4.3 Respondents’ Demographics
In this section the researcher sought to find out the age of the participants, the level of education and duration they have been tenants in the specific malls.

Table 4.1: Frequency Distribution of Respondents by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>27</td>
<td>32.93</td>
</tr>
<tr>
<td>30-39</td>
<td>41</td>
<td>51.22</td>
</tr>
<tr>
<td>40-49</td>
<td>12</td>
<td>14.63</td>
</tr>
<tr>
<td>Above 50 years</td>
<td>1</td>
<td>1.22</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Table 4.1 revealed that most of the respondents were within the age category of 30-39 years (41, 51.22%), followed by age category 20-29 (27, 32.93 %). This was followed by age category 40-49 (1, 1.22%).

Age was significant to the study because individuals who grow up at the same time are a generation and often share many of the same experiences as others of the same age group. This depicts that age can influence strategic capacity management and quality of services offered by the shopping malls.

Table 4.2: Frequency Distribution of Respondents by Education Level

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency</th>
<th>Cumulative Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters holder</td>
<td>18</td>
<td>18</td>
<td>21.95</td>
</tr>
<tr>
<td>First Degree holder</td>
<td>21</td>
<td>39</td>
<td>25.61</td>
</tr>
<tr>
<td>Diploma holder</td>
<td>34</td>
<td>73</td>
<td>41.46</td>
</tr>
<tr>
<td>Certificate</td>
<td>7</td>
<td>80</td>
<td>9.76</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>81</td>
<td>1.22</td>
</tr>
</tbody>
</table>

| Total           | 81        | 100.00               |

Results in table 4.2 shows that majority of respondents interviewed had reached Diploma level (34, 41.46%), followed by Degree holders (21, 25.61%). This was closely followed by 21.95% (18) of the respondents who were found to have attained Masters Level. A small percentage of respondents (7, 9.76%) had a certificate. Level of education was significant to this study because educated respondents have higher capability in processing information and are able to make substantive decisions and therefore education can influence implementation of capacity management and quality of services offered by the shopping malls.
Table 4.3: Distribution of Respondents by Number of Years as a Tenant in the Shopping mall

<table>
<thead>
<tr>
<th>Duration (years)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 2 years</td>
<td>9</td>
<td>10.98</td>
</tr>
<tr>
<td>3-6</td>
<td>20</td>
<td>24.39</td>
</tr>
<tr>
<td>7-9</td>
<td>42</td>
<td>51.22</td>
</tr>
<tr>
<td>Over 10</td>
<td>10</td>
<td>13.41</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

The findings in table 4.3 revealed that the highest percentage of respondents (51.22%) had been tenants in the specific shopping malls for a period of between 7 and 9 years. Followed by 24% of the respondents as tenants in a specific shopping mall for a duration of between 3 and 6 years when this study was being undertaken. This demographic was important because the duration that a respondent had been a tenant in a specific shopping mall gives credence to the response provided because it is assumed that, ceteris paribus, the longer someone has been in an organization the better the understanding of the operations of the organization and in this case, the service delivery mechanism of the entity aimed to satisfy customers.

It also affects/impacts their expectations as a customer, in that things that would otherwise be considered unsatisfactory are considered normal, due to getting used to the same. In addition, the duration in which a shopping mall has operated gives an indication of its experience in service operations and managing customer expectations / customer satisfaction, and it is expected that strategic capacity management would have been adequately developed/matured over time.

4.4 Matching Supply with Demand and Service Quality

In this section, the researcher sought to determine the effect of matching supply with demand on service quality of the shopping malls in Nairobi.
To assess the respondents’ level of agreement/disagreement on service delivery process, ten (10) statements were given using a five point Likert scale. The scale had two opposing negative and positive options on how the respondents agreed with the statements with a neutral option ranging from, strongly disagree-1, through neither agree nor disagree-3 to strongly agree-5. The response was as shown in table 4.4:
Table 4.4: Frequency distribution on matching supply with demand and service quality

<table>
<thead>
<tr>
<th>Indicator</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The shopping mall alters the number of service providers during peak times</td>
<td>20.99%</td>
<td>53.09%</td>
<td>7.41%</td>
<td>16.05%</td>
<td>2.47%</td>
<td>100%</td>
</tr>
<tr>
<td>to meet the customer demands.</td>
<td>17</td>
<td>43</td>
<td>6</td>
<td>13</td>
<td>2</td>
<td>81</td>
</tr>
<tr>
<td>The shopping mall employs part time staff on part time basis during</td>
<td>22.22%</td>
<td>35.80%</td>
<td>9.88%</td>
<td>27.16%</td>
<td>4.94%</td>
<td>100%</td>
</tr>
<tr>
<td>periods of increased demands.</td>
<td>18</td>
<td>29</td>
<td>8</td>
<td>22</td>
<td>4</td>
<td>81</td>
</tr>
<tr>
<td>The shopping mall shares facilities that are idle with the other sections</td>
<td>17.28%</td>
<td>19.75%</td>
<td>13.58%</td>
<td>38.27%</td>
<td>11.11%</td>
<td>100%</td>
</tr>
<tr>
<td>of the mall that are in need of the spare capacity.</td>
<td>14</td>
<td>16</td>
<td>11</td>
<td>31</td>
<td>9</td>
<td>81</td>
</tr>
<tr>
<td>The shopping mall adopts “do it yourself procedure” to tenants and</td>
<td>6.17%</td>
<td>14.81%</td>
<td>22.22%</td>
<td>38.27%</td>
<td>18.52%</td>
<td>100%</td>
</tr>
<tr>
<td>this releases various resources to be utilized at different levels.</td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>31</td>
<td>15</td>
<td>81</td>
</tr>
<tr>
<td>During periods of high demand for services by the customers- both</td>
<td>18.52%</td>
<td>19.75%</td>
<td>12.35%</td>
<td>40.74%</td>
<td>7.41%</td>
<td>100%</td>
</tr>
<tr>
<td>internal and external customers, the shopping mall offers overtime</td>
<td>15</td>
<td>16</td>
<td>10</td>
<td>33</td>
<td>6</td>
<td>81</td>
</tr>
<tr>
<td>facilities to its staff to cope with the increased demand.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The shopping mall continuously trains and develops its employee to</td>
<td>27.16%</td>
<td>4.94%</td>
<td>22.22%</td>
<td>35.80%</td>
<td>9.88%</td>
<td>100%</td>
</tr>
<tr>
<td>improve their capacity to handle more than one task at a time.</td>
<td>22</td>
<td>4</td>
<td>18</td>
<td>29</td>
<td>8</td>
<td>81</td>
</tr>
<tr>
<td>The Mall engages different contractors in service provision to the</td>
<td>12.35%</td>
<td>40.74%</td>
<td>7.41%</td>
<td>18.52%</td>
<td>19.75%</td>
<td>100%</td>
</tr>
<tr>
<td>establishment and its customers.</td>
<td>10</td>
<td>33</td>
<td>6</td>
<td>15</td>
<td>16</td>
<td>81</td>
</tr>
<tr>
<td>Sub-contracting of services by the mall has led to the loss of control</td>
<td>14.81%</td>
<td>22.22%</td>
<td>38.27%</td>
<td>6.17%</td>
<td>18.52%</td>
<td>100%</td>
</tr>
<tr>
<td>over the service process.</td>
<td>12</td>
<td>18</td>
<td>31</td>
<td>5</td>
<td>15</td>
<td>81</td>
</tr>
<tr>
<td>The use of experts in areas such as taxation, treasury and operational</td>
<td>18.52%</td>
<td>19.75%</td>
<td>12.35%</td>
<td>40.74%</td>
<td>7.41%</td>
<td>100%</td>
</tr>
<tr>
<td>decisions enables the mall to deliver quality services to its clients and</td>
<td>15</td>
<td>16</td>
<td>10</td>
<td>33</td>
<td>6</td>
<td>81</td>
</tr>
<tr>
<td>therefore increase its competitiveness.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.4 above indicates that altering unused capacity through facilities that are idle with the other sections of the mall that are in need of the spare capacity was an effective method as agreed by 49.38% of the respondents (38.27% agreed, 11.11% strongly agreed).
Interestingly, the findings show that more than half of the respondents interviewed (58.02%) declined that the shopping malls employ part time staff on part time basis during periods of increased demands (22.22% strongly disagree, 35.80% disagreed). This was also evident by the highest percentages (74.08%) of the participants who were opposed to the view that the shopping malls alter the number of service providers during peak times to meet the customer demands.

Table 4.4 also reveals that the specific shopping malls adopt “do it yourself procedure” to tenants and this releases various resources to be utilized at different levels as agreed by more than half (56.79%) of the participants in the study area.

According to table 4.4, the shopping malls continuously trains and develops the employees to improve their capacity to handle more than one task at a time was a view among the majority (45.68%) of the participants interviewed and this goes to mean that the specific malls will continue to improve the quality of services offered. Interestingly, less than half (38.27%) of the respondents agreed that the malls engage different contractors in service provision to the establishment and its customers.

The results show that just a small percentage (24.69%) of respondents were of the view that sub-contracting of services by the malls did not lead to the loss of control over the service process. While close to half (48.15%) of the participants interviewed were of the view that the use of experts in areas such as taxation, treasury and operational decisions enables the mall to deliver quality services to its clients and therefore increase its competitiveness.

4.5 Forecasting Future Demand and Service Quality

In this section, the researcher sought to determine the effect of forecasting future demand on service quality of the shopping malls in Nairobi.

To assess the respondents’ level of agreement/disagreement on service delivery process, five (5) statements were given using a five point Likert scale. The scale had two opposing negative and positive options on how the respondents agreed with the statements with a neutral option ranging from, strongly disagree-1, through neither agree nor disagree-3 to strongly agree-5. The response was as shown in table 4.5:
Table 4.5: Frequency distribution on forecasting future demand and service quality

<table>
<thead>
<tr>
<th>Indicator</th>
<th>SD</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>SA</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Shopping Mall management charges different price for space that is strategically located in the same floor.</td>
<td>12.35%</td>
<td>19.75%</td>
<td>7.41%</td>
<td>40.74%</td>
<td>18.52%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>16</td>
<td>6</td>
<td>33</td>
<td>15</td>
<td>81</td>
</tr>
<tr>
<td>The shopping mall requires customers to wait for the service in a queue and this improves the quality of services offering.</td>
<td>38.27%</td>
<td>18.52%</td>
<td>6.17%</td>
<td>14.81%</td>
<td>22.22%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>15</td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>81</td>
</tr>
<tr>
<td>The staff in the shopping mall are always rescheduled to increase the service levels at any given time in the mall and can be moved from one point to a point where there is a deficit.</td>
<td>17.28%</td>
<td>19.75%</td>
<td>13.58%</td>
<td>38.27%</td>
<td>11.11%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>16</td>
<td>11</td>
<td>31</td>
<td>9</td>
<td>81</td>
</tr>
<tr>
<td>The shopping mall strives to understand what suffers the customer to establish whether the front line staff have a role to play.</td>
<td>6.17%</td>
<td>14.81%</td>
<td>22.22%</td>
<td>38.27%</td>
<td>18.52%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>12</td>
<td>18</td>
<td>31</td>
<td>15</td>
<td>81</td>
</tr>
<tr>
<td>The management aims at improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand.</td>
<td>18.52%</td>
<td>19.75%</td>
<td>12.35%</td>
<td>40.74%</td>
<td>7.41%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>16</td>
<td>10</td>
<td>33</td>
<td>6</td>
<td>81</td>
</tr>
</tbody>
</table>

The findings show that management of the shopping malls in the study area charges different price for space that is strategically located in the same floor as indicated by the highest (59.26%) of the respondents. This goes to mean that the sampled malls want to ensure the highest level of capacity utilization without sacrificing profits.
The results indicate that more than half (56.79%) of the respondents interviewed were opposed to the statement that the shopping malls require customers to wait for the service in a queue and this improves the quality of services offered in the malls. This could mean that the sampled malls were keen on time element on serving their customers just in time.

It was found that the staff in the specific shopping malls are always rescheduled to increase the service levels at any given time in the mall and can be moved from one point to a point where there is a deficit as noted by 49.38% of the respondents. This could imply that many of the shopping malls in the target population are in control of their capacity.

The study established that shopping mall strives to understand what suffers the customer to establish whether the front line staff have a role to play as noted by majority (56.79%) of the respondents interviewed. This could suggest that the shopping malls in the target population try to match the capacity levels according to the changing demand patterns. The results could also suggest a clear advantage of the sampled malls having the appropriate level of staff all the time with relation to the demand of a particular season.

It was noted that the management aims at improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand as indicated by 48.15% of the respondents. This goes to mean that different types of services present service operations managers with a different operational focus.

4.6 Respondents on Capacity Management Strategies used by Shopping Malls in Nairobi

In this section, the researcher was interested to know how the respondents rated the capacity management strategies whose contribution was aimed to achieving service quality. When asked if the shopping mall has been employing different approaches to manage its capacity and in the process influence service quality. The response was as follows:
The results indicate that all the respondents unanimously indicated that the sampled shopping malls were employing various capacity management strategies. Among the three capacity management practices (shifting, off-loading and sub-contracting) whose contribution was to achieving service quality objectives by the specific shopping malls, shifting capacity topped the list at 86.25%. This is attributed to the fact that most shopping malls attract a lot of shoppers between 2pm and 4pm on weekends. Shoppers are also likely to stay out late shopping on weeknights, making purchases and this therefore called for a versatile strategy like shifting capacity management strategy; which collaborated the findings of this study.

Table 4.6: Capacity Management Practices

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shifting Capacity</td>
<td>69</td>
<td>86.25</td>
</tr>
<tr>
<td>Offloading Capacity</td>
<td>5</td>
<td>6.25</td>
</tr>
<tr>
<td>Sub-Contracting Capacity</td>
<td>7</td>
<td>7.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Table 4.7: Descriptive analysis of capacity management strategies used by shopping malls to enhance service quality

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abb r.</th>
<th>N</th>
<th>Mean</th>
<th>Media n</th>
<th>St. Dev.</th>
<th>Min.</th>
<th>Max.</th>
<th>Skew</th>
<th>Kurt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Quality</td>
<td>SQ</td>
<td>3</td>
<td>0.471</td>
<td>0.458</td>
<td>0.152</td>
<td>0.16</td>
<td>0.750</td>
<td>0.10</td>
<td>2.17</td>
</tr>
<tr>
<td>Price Differentiation</td>
<td>PD</td>
<td>3</td>
<td>0.726</td>
<td>17.00</td>
<td>67.34</td>
<td>3.00</td>
<td>225.00</td>
<td>1.22</td>
<td>3.18</td>
</tr>
<tr>
<td>Promoting off-Peak Demand</td>
<td>PP</td>
<td>3</td>
<td>0.700</td>
<td>1.000</td>
<td>0.466</td>
<td>0.00</td>
<td>1.000</td>
<td>-0.87</td>
<td>1.76</td>
</tr>
<tr>
<td>Communicating with Customers</td>
<td>CC</td>
<td>3</td>
<td>0.100</td>
<td>0.000</td>
<td>0.305</td>
<td>0.00</td>
<td>1.000</td>
<td>2.66</td>
<td>8.11</td>
</tr>
<tr>
<td>Timing and Location of the Service</td>
<td>TLS</td>
<td>3</td>
<td>0.372</td>
<td>0.161</td>
<td>0.398</td>
<td>0.00</td>
<td>1.010</td>
<td>0.83</td>
<td>1.79</td>
</tr>
<tr>
<td>Developing Complementary Services</td>
<td>DCS</td>
<td>3</td>
<td>0.045</td>
<td>0.002</td>
<td>0.091</td>
<td>0.00</td>
<td>0.332</td>
<td>2.31</td>
<td>0.04</td>
</tr>
<tr>
<td>Shifting Capacity</td>
<td>SC</td>
<td>3</td>
<td>0.637</td>
<td>0.125</td>
<td>14.72</td>
<td>0.938</td>
<td>57.920</td>
<td>2.21</td>
<td>7.25</td>
</tr>
<tr>
<td>Offloading Capacity</td>
<td>OC</td>
<td>3</td>
<td>0.700</td>
<td>1.000</td>
<td>0.466</td>
<td>0.00</td>
<td>1.000</td>
<td>-0.87</td>
<td>1.76</td>
</tr>
<tr>
<td>Subcontracting Capacity</td>
<td>SCC</td>
<td>3</td>
<td>0.300</td>
<td>0.000</td>
<td>0.466</td>
<td>0.00</td>
<td>1.000</td>
<td>0.92</td>
<td>1.24</td>
</tr>
</tbody>
</table>

Results in table 4.7 show an average (median) SQ (Service Quality) score of 47.1% (45.8%) which is relatively normally distributed as shown by the Skewness and Kurtosis coefficients of 0.103 and 2.176. The Jarque-Bera statistic for Service Quality (SQ), was 0.902 with a significance of 0.637, providing a further confirmation that the Service Quality variable was relatively normally distributed. Jarque–Bera test is a goodness-of-fit test of whether sample data have the skewness and kurtosis matching a normal distribution. According to the findings, the minimum Service Quality is 16.7% while the maximum SQ is 75.0% implying that strategic capacity management by the sampled shopping malls impact service quality.

The descriptive statistics presented in table 4.7 above show that the **Price Differentiation** is supported by 57% (mean, 57.267) of the total responses which could mean that the sampled malls want to ensure the highest level of capacity utilization without sacrificing profits. Further, the descriptive statistics also show that **Promoting off-Peak Demand** is only supported by 10% (median, 1.00) of the total responses from the sampled populace. In addition, table 4.7 above shows that the average (median) **Timing and Location of the**
Service is supported by 16.1% (median, 0.161) of the total responses. These results imply that the sampled shopping malls adjust their hours and days of service delivery to more directly reflect customer demand.

Further results in table 4.7 also indicate that capacity management strategies by the sampled malls Developed Complementary Services which is supported by 4.5% (mean, 0.045) of the total responses. Table 4.7 also shows that Shifting Capacity is supported by 63.7% (mean, 0.637) of the total responses. Offloading Capacity as shown by table 4.8 accounted for 70% (mean, 0.700) of the total responses in the sampled populace. While Subcontracting Capacity account for 30% (mean, 0.300) of the total responses from the sampled shopping malls.

Table 4.8: Spearman’s correlation coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>SQ</th>
<th>PD</th>
<th>PPD</th>
<th>CC</th>
<th>TLS</th>
<th>DCS</th>
<th>SC</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td></td>
<td>0.736*</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPD</td>
<td>0.515*</td>
<td>0.690*</td>
<td>0.004</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.290</td>
<td>0.520*</td>
<td>0.012</td>
<td>0.003</td>
<td>0.247</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>-0.122</td>
<td>-0.131</td>
<td>-0.097</td>
<td>-0.096</td>
<td>0.520</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLS</td>
<td>0.520</td>
<td>0.489</td>
<td>0.611</td>
<td>0.613</td>
<td></td>
<td>0.309</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.560*</td>
<td>0.739*</td>
<td>0.606*</td>
<td>0.391*</td>
<td>0.192</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCS</td>
<td>0.001</td>
<td>0.000</td>
<td>0.000</td>
<td>0.033</td>
<td>0.039</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.611*</td>
<td>0.648*</td>
<td>0.542*</td>
<td>0.212</td>
<td>-0.363</td>
<td>0.388*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC</td>
<td>0.000</td>
<td>0.000</td>
<td>0.002</td>
<td>0.261</td>
<td>0.049</td>
<td>0.034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.553*</td>
<td>0.496*</td>
<td>0.048</td>
<td>0.218</td>
<td>-0.004</td>
<td>0.346</td>
<td>0.534*</td>
<td></td>
</tr>
<tr>
<td>OC</td>
<td>0.002</td>
<td>0.005</td>
<td>0.803</td>
<td>0.247</td>
<td>0.982</td>
<td>0.061</td>
<td>0.002</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td>0.312</td>
<td>0.444*</td>
<td>0.643*</td>
<td>0.520*</td>
<td>-0.633*</td>
<td>0.234</td>
<td>0.404*</td>
<td>-0.113</td>
</tr>
<tr>
<td>SCC</td>
<td>0.093</td>
<td>0.014</td>
<td>0.000</td>
<td>0.003</td>
<td>0.000</td>
<td>0.213</td>
<td>0.027</td>
<td>0.551</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at the 5% level.

SQ - Service Quality; PD - Price Differentiation; PPD - Promoting off-Peak Demand; CC - Communicating with Customers; TLS - Timing and Location of the Service; DCS - Developing Complementary Services; SC - Shifting Capacity; OC - Offloading Capacity; SCC - Subcontracting Capacity.
Table 4.8 presents the Spearman’s correlation coefficients. Spearman’s coefficients are appropriate for the data because it contains both continuous and binary variables. The results show that \textit{SQ-Service Quality} is significant and positively correlated with \textit{PD}, \textit{PDD}, \textit{CC}, and \textit{SCC} at the 5\% level of significance. This finding provides prima-facie evidence of a positive association between SQ and the Price Differentiation, Promoting off-Peak Demand, Communicating with Customers and Subcontracting Capacity. The coefficients reveal a negative albeit insignificant coefficient between \textit{SQ} and the \textit{Timing and Location of the Service}. The highest correlation coefficient is 0.739, which is between \textit{Developing Complementary Services} and \textit{Price Differentiation}. This suggests that multicollinearity was not a serious problem among the variables in the study.

4.7 Chi Square Test on Strategic Capacity Management and Service Quality

In this section, the researcher sought to determine relationship between strategic capacity management and service quality of the shopping malls in Nairobi County.

The chi-squared test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. A very small chi square test statistic means there is a relationship while a very large chi square test statistic means no relationship. The results are as follows:

\textbf{Table 4.9: Chi square test statistic}

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>53.014</td>
<td>12</td>
<td>.000</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>51.558</td>
<td>12</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>.169</td>
<td>1</td>
<td>.681</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textit{a. 14 cells (70.0\%) have expected count less than 5. The minimum expected count is .06.}

The chi square tests show that $\chi^2 (1) = 53.014$, $p < 0.000$. Since the p-value is less than significance level $\alpha = 0.05$, the null hypothesis is rejected and conclusion is made that there is an association between strategic capacity management factors (i.e. matching supply with demand, forecasting future demand) and service quality. This goes to mean that the relationship between strategic capacity management factors and service quality of the sampled shopping malls in Nairobi County is significant.
4.8 Chapter Summary
The demographics revealed that most participants are within the productive age (30-39) that can contribute a lot for their performance. The findings in this chapter also showed that most participants are either diploma (41.46%), or university degree holders (25.61%) as indicated by the statistics. More than half of the respondents in the study area (51.22%) were found to have been tenants in the specific shopping malls for a period of between 7 and 9 years. Majority (49.38%) of the respondents were of the view that altering unused capacity through facilities that are idle with the other sections of the mall that are in need of the spare capacity was an effective method. However, it was found that the sampled shopping malls did not employ part time staff on part time basis during periods of increased demands.

Additionally, the study has found that the shopping malls continuously trains and develops the employees to improve their capacity to handle more than one task at a time which goes to mean that the specific malls will continue to improve the quality of services offered. It has also been found that the shopping malls management charges different price for space that is strategically located in the same floor as indicated by the highest (59.26%) percentages of the participants. According to the results, the management of the malls in the study area aim to improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand.

The findings also established that the sampled shopping malls did not require customers to wait for the service in a queue and this improved the quality of services offered in the malls. It was found that the sampled shopping malls were employing various capacity management strategies and among the three capacity management practices (shifting, off-loading and sub-contracting) whose contribution was to achieving service quality objectives by the specific shopping malls, shifting capacity topped the list at 86.25 %. The Spearman’s correlation coefficients noted a prima-facie evidence of a positive association between service quality and price differentiation, promoting off-peak demand, communicating with customers and subcontracting capacity. This was supported by chi square test which concluded that there is an association between strategic capacity management factors (i.e. matching supply with demand, forecasting future demand) and
service quality. The following chapter (chapter 5) discussed the implications of the primary study and the recommendations.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction
This was the final chapter of the study. It summarized the findings of the primary study, drew conclusions based on the findings of the study, provided recommendations as well as insight in the areas for further research. The following research questions guided the chapter: - what is the effect of matching supply with demand on service quality of the shopping malls in Nairobi?; how does forecasting future demand affect service quality of the shopping malls in Nairobi?; and what are the capacity management strategies used by shopping malls in Nairobi?

5.2 Summary of the Study
The study sought to examine the influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, Kenya. The study focused on the following research questions: what is the effect of matching supply and demand on service quality among shopping malls in Nairobi?; how does forecasting future demand affect service quality among shopping malls in Nairobi?; and what are the capacity management strategies used by shopping malls in Nairobi? The study used descriptive research design to explain the variables of the study. The study targeted 1470 tenants in the major shopping malls based in Nairobi County.

Applying Slovene formula, the study engaged 94 tenants drawn purposively from various business form the respective shopping malls. A questionnaire was the key instrument for primary data collection which was administered using Survey Monkey procedure. Content analysis method was applied to analyze qualitative data obtained from the secondary sources. Inferential statistics such as percentages as well as descriptive statistics such as graphs and pie charts were used to analyse quantitative data obtained from the survey. Finally, the study used content and principle component analyses to extract predominant capacity management strategies used by shopping malls in Nairobi.

It was established that most members are inside the gainful age bracket (30-39) that can contribute a great deal for their execution. The discoveries in this study additionally demonstrated that most members are either diploma or college degree holders. The greater part of the respondents in the investigation territory were found to have been occupants in
the explicit shopping malls for a time of between 7 and 9 years. Lion's share of the respondents were of the view that modifying unused capacity through offices that are inactive with alternate segments of the shopping mall that need the extra capacity was a viable technique. In any case, it was discovered that the sampled shopping malls did not utilize part time staff on part time basis during periods of increased demands.

Moreover, the examination has discovered that the shopping malls constantly prepares and builds up the workers to enhance their ability to deal with more than one undertaking at any given moment which goes to imply that the explicit shopping malls will keep on enhancing the nature of services offered. It has additionally been discovered that the shopping malls management charges distinctive cost for space that is deliberately situated in indistinguishable floor. As per the outcomes, the management of the malls in the study area aim to improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand.

The discoveries additionally established that the inspected shopping malls did not expect clients to sit tight for the services in a line and this enhanced the nature of services offered in the shopping malls. It was discovered that the inspected shopping malls were utilizing different capacity management strategies and among the three capacity management practices whose commitment was to accomplishing service quality goals by the explicit shopping malls, shifting capacity beat the rundown at 86.25%. The Spearman’s correlation coefficients noted a prima-facie evidence of a positive association between service quality and price differentiation, promoting off-peak demand, communicating with customers and subcontracting capacity. This was upheld by chi square test which inferred that there is a relationship between vital limit the board factors (for example matching supply with demand, forecasting future demand) and service quality.

5.3 Discussion

5.3.1 Effect of Matching Supply with Demand on Service Quality of the Shopping Malls in Nairobi.

The primary findings of this study have established that altering unused capacity through facilities that are idle with the other sections of the mall that are in need of the spare capacity was an effective method. Tan (2014) had a similar view and noted that altering unused
capacity strategy is being used by airlines to increase their performance in situations where there exist a constrained capacity. Interestingly, the results showed that the shopping malls in the study area did not employ part time staff on part time basis during periods of increased demands. It was also found that the sampled shopping malls did not alter the number of service providers during peak times to meet the customer demands. This finding as noted by Kivamba (2013) goes to mean that matching supply with demand as strategy in capacity management is not popular within the shopping malls because most of the services sort by the customers are not booked by the clients like in the airline, and car rental.

Putting into perspective the first research question: what is the effect of matching supply with demand on service quality of the shopping malls in Nairobi? with the literature review, Ankitta (2014) pointed that a common response during slow demand is to discount the price of the service. Kivamba (2013) noted that this strategy relies on basic economics of supply and demand to be effective, however a price differentiation strategy depends on solid understanding of customer price sensitivity and demand curves.

The literature review according to Aviv (2013) noted that during off-seasons holiday resorts use their premises as retreat location for business or professional groups. In the same way in order to encourage long distance dialling the Telephone companies offer lower rates at night. The results of this study have reported that the sampled shopping malls adopt “do it yourself procedure” to tenants which goes to mean that various resources to be utilized at different levels are minimal. However, according to the literature review, Goeldner (2014) noted that this concept may have a tendency to reduce the efficiency of the present system at best, or, at worst, to destroy the delicate balance found in most service delivery systems. It was also evident from the findings that the shopping malls in the study area continuously trains and develops the employees to improve their capacity to handle more than one task at a time which means that the specific malls will continue to improving the quality of services offered. Interestingly, it was found that the malls did not fully engage different contractors in service provision to the establishment and its customers.

The study has established that sub-contracting of services by the malls led to the control of the service process. Close to half of the participants interviewed were of the view that the use of experts in areas such as taxation, treasury and operational decisions enables the mall to deliver quality services to its clients and therefore increase its competitiveness. According to the literature review, Kotler (2014) established that there are seven
approaches to increasing service quality, and these are having skilful workers through the process of recruitment and selection, increasing quantity of service by surrendering quality, industrializing the services, reducing or making absolute the service need by inventing a product solution, designing of more effective services, presenting customers with incentives to substitute own labour with company labour and also harnessing power of technology to give customers better services.

5.3.2 Effect of Forecasting Future Demand on Service Quality of the Shopping Malls in Nairobi.

The study discovered that the management of the shopping malls in the study area charges different price for space that is strategically located in the same floor. The study also reported that the shopping malls in the study area did not require customers to wait for the service in a queue and this means an improved quality of services offered in the malls. This could also mean that the sampled malls were keen on time element on serving their customers just in time.

Shan (2014) reported that forecasting is a technique which involves prediction of sales (demand) for individual products. Shan argues that forecasting is a difficult task and a spot-on forecast is practically impossible. However, Aquilano (2013) contend that a carefully executed prediction assessments guarantee a better quality service and facilitate capacity planning. This is amplified by another study conducted by Kivamba (2013) which found that in order to be effective, price differentiation strategy depends on solid understanding of customer price sensitivity and demand curves. Elsewhere, Chandana (2013) found that over reliance on price can result in price wars in an industry where eventually all competitors suffer. Maccini (2014) holds a similar view that overuse or exclusive use of price as a strategy for managing demand is also risky due to potential impact on the organization’s image and the possibility of attracting undesired market segments.

It has been reported that staff in the specific shopping malls are always rescheduled to increase the service levels at any given time in the mall and can be moved from one point to a point where there is a deficit which goes to mean that many of the shopping malls in the target population are in control of their capacity. According to the literature review, Meissner (2016) noted that some firms adjust their hours and days of service delivery to more directly reflect customer demand. This could suggest that the shopping malls in the
target population try to match the capacity levels according to the changing demand patterns.

Based on the literature review, Birbil (2014) noted that this is an example of varying the service offering during a period of low demand. According to an empirical review by Nemirovski (2015), it was established that approach in developing complementary services is to change the nature of the service offering, depending on the season of the year, day of the week, or time of day. For example, a ski resort in Vancouver, Canada, offers its facilities for executive development and training programs during the summer when snow skiing is not possible.

The study established that the shopping malls did not require customers to wait for the service in a queue and this improves the quality of services offered in the malls. It was deduced that the sampled malls were keen on time element on serving their customers just in time. This is in accordance with sentiments of Armistead (2015) who noted that the elements of resource productivity which are important are resource utilisation, input costs, and efficiency related to doing things right first time and throughput time.

The study established that shopping mall strives to understand what suffers the customer to establish whether the front line staff have a role to play. The study also deduced that the shopping malls try to match the capacity levels according to the changing demand patterns. Anderson (2013) established that good service providers will struggle to deal with the two extremes of when a chase strategy runs out of capacity and becomes level and when demand drops away from effective capacity so that resource productivity drops.

It was noted that the management aims at improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand. It was deduced that the different types of services present service operations managers with a different operational focus. This concept of capacity management strategy for managing service resources as noted by Hart (2015) has a particular link to service quality and unconditional service guarantees.

5.3.3 Capacity Management Strategies used by Shopping Malls in Nairobi.

The results have indicated that the sampled shopping malls were employing different capacity management strategies. The findings have shown that among the three capacity management practices (shifting, off-loading and sub-contracting) whose contribution was
to achieving service quality objectives by the specific shopping malls, shifting capacity was the most dominant. This is attributed to the fact that most shopping malls attract a lot of shoppers between 2pm and 4pm on weekends. Shoppers are also likely to stay out late shopping on weeknights, making purchases and this therefore called for a versatile strategy like shifting capacity management strategy; which collaborated the findings of this study. The study established that the main capacity management practice widely employed by shopping malls is shifting capacity followed by offloading capacity management.

This finding is amplified by a survey done on Kenyan shopping malls by Knight Frank, (2016) which found out that there was an improvement and creative utilization of unused mall spaces and even parking space to incorporate newer retail categories to attract consumers and drive additional revenue. Sub-contracting capacity was the least popular according to the findings, only 7.5 percent of the total respondents interviewed mentioned it as being employed by the shopping malls. This view was shared by Alp and Tan (2013) who observed that Sub-contracting capacity strategy is being used by airlines to increase their performance in situation where there exist a constrained capacity. Sub-contracting has been described as contractual relationship between an external vendor and an enterprise in which the vendor assumes responsibility for one or more business functions of the enterprise' (White and James 2014). It majorly deals with outsourcing of important but non-core business activities to “experts in the area”, Johnson (2007) and this is expected to improve the level of delivery of goods and services to customers and hence increase their competitive advantage. Therefore the study points to the fact that this strategy is not popular in the shopping malls because most of the services sort by the customers are not booked by the clients like in the airline, and car rental.

The literature review indicated that capacity decisions are generally strategic involving investments and therefore commitment in resources such as equipment, buildings and manpower. In light of this factor, capacity decisions affect greatly into a myriad of organizational functionality. The literature review concurs with the current findings which showed that all the respondents unanimously agreed that the sampled shopping malls were employing various capacity management strategies.

The results are in line with the literature review by Kemal (2013) which noted that the most widely applied method in service industry is pricing to shift the peak demand to off-peak when people are not very interested in buying. The literature review by Bethwell (2014)
observed that the concept of offloading strategy for managing service resources has a particular link to service quality and unconditional service guarantees. Finally, the chi square results confirmed that there is an association between strategic capacity management strategies (i.e. matching supply with demand, forecasting future demand) and service quality.

5.4 Conclusions

5.4.1 Effect of Matching Supply with Demand on Service Quality of the Shopping Malls in Nairobi.
The study concludes that altering unused capacity through facilities that are idle with the other sections of the shopping malls in the study area that are in need of the spare capacity is an effective strategic capacity management. It has been found that the shopping malls in the study area did not employ part time staff on part time basis during periods of increased demands. It has also been noted that the sampled shopping malls did not alter the number of service providers during peak times to meet the customer demands. It can be concluded that this strategy (matching supply with demand) is not popular among the sampled shopping malls because most of the services sort by the customers are not booked by the clients like in the airline, and car rental.

The specific shopping malls adopt “do it yourself procedure” to tenants and this releases various resources to be utilized at different levels. In addition, the shopping malls continuously trains and develops the employees to improve their capacity to handle more than one task at a time and it can be concluded that the sampled shopping malls will continue to improve the quality of services offered. However, it has been found that that the shopping malls in the study area do not engage different contractors in service provision to the establishment and its customers. It is however observed that sub-contracting of services by the malls did not lead to the loss of control over the service process. Use of experts in areas such as taxation, treasury and operational decisions enables the mall to deliver quality services to its clients and therefore increase its competitiveness.

5.4.2 Effect of Forecasting Future Demand on Service Quality of the Shopping Malls in Nairobi.
Based on the empirical evidence, in order to be effective, price differentiation strategy depends on solid understanding of customer price sensitivity and demand curves. As per
the results of this study, it can be concluded that the shopping malls in the study area are keen to ensuring the highest level of capacity utilization without sacrificing profits. The sampled shopping malls do not require customers to wait for the service in a queue and this improves the quality of services offered in the malls. The study concludes that the sampled shopping malls are keen on time element on serving their customers just in time. The study has established that the staff in the specific shopping malls are always rescheduled to increase the service levels at any given time in the mall and can be moved from one point to a point where there is a deficit which is a clear indication that many of the shopping malls in the target population are in control of their capacity. It is also concluded that the shopping malls in the target population try to match the capacity levels according to the changing demand patterns. There is a clear advantage of the sampled malls having the appropriate level of staff all the time with relation to the demand of a particular season.

5.4.3 Capacity Management Strategies used by Shopping Malls in Nairobi.
The practices used to manage capacity requirements were; shifting capacity, offloading capacity and sub-contracting. Rescheduling of staff and activities majorly led to service flexibility and service time. Capacity strategies such as promoting off-peak demand; communicating with customers; and subcontracting capacity is significant and positively correlated with service quality offered by the sampled shopping malls. The study concludes that the main strategic capacity management widely employed by shopping malls is offloading capacity and shifting capacity management. It can be concluded that strategic capacity management by the sampled shopping malls had been fairly useful on process time and response time which is was good in service flexibility and hence service quality.

Shifting capacity majorly responded to quick clearance while contractors in service provision led to reduced complains and continuous service, whereas flexible staff helped in meeting service time. However, queuing did not quite effectively respond to customer needs, other than enhancing minimum service. With respect to the general objective of the study: influence of strategic capacity management on the service quality of the shopping malls in Nairobi County, the findings were clear that strategic capacity management practices especially the offloading and shifting capacity play a significant role in gluing the customers to the sampled shopping malls.
5.5 Recommendations

5.5.1 Recommendation for Improvement

5.5.1.1 What is the effect of matching supply with demand on service quality of the shopping malls in Nairobi?

To achieve a continuous good service quality, staff training is inevitable. Further, teamwork and effective, prompt communication should be done within all the management levels. The main challenges that shopping malls face ought to be carefully addressed to ensure that resources are utilized as efficiently as possible and customers are satisfied.

5.5.1.2 How does forecasting future demand affect service quality of the shopping malls in Nairobi?

For service quality the indication is that in order to increase the probability of service quality in the shopping malls, efforts must be geared towards enhancing pricing or cost effectiveness of their malls. Continuously training and retraining of employees working in the shopping malls must be engaged on fine tuning their responsiveness to customer compliments and customer complains (which happen to be the most influential parameters in this respect). Equally, the shopping malls management must enhance their sub-contracting capacity management strategies on quality of product/services and constantly fine tune pricing of the malls approach.

5.5.1.3 What are the capacity management strategies used by shopping malls in Nairobi?

The management of the shopping malls should consider putting in place the recommended capacity management strategies (shifting, offloading and subcontracting) to even better its service quality by enhancement of capacity management practices that have not been fully embraced by some shopping malls such as subcontracting capacity. The findings show that strategic capacity management is in use in these shopping malls, though it was evident that some elements of capacity management strategies needs to be strengthened to help fortify their effects on enhancing the service quality in the malls. Such strategies like, “Do it Yourself” procedures to customers in relation to offloading capacity strategy. Others include enhanced use of the element of equipment sharing with regard to sub-contracting strategy as well as alter of operations with fluctuating demand relative to level strategy.
It is therefore imperative that every shopping mall pays good attention not just to the implementation of strategic capacity management but also in ensuring that such implementation are thorough by breaking it down into its respective variables and measure the impact of each of the strategy or capacity management practice so as to know the significant level of each practices. It is therefore safe to conclude that proper implementation of strategic capacity management in a shopping mall will result in improved service quality.

5.5.2 Recommendations for Future Studies.
The study targeted only the main shopping malls located in Nairobi County which makes it impossible to generalize the findings. The study recommends a comparative study to determine the influence of strategic capacity management on the service quality of the shopping malls in Kenya.

Additionally, the study adopted descriptive research design by engaging the tenants of the shopping malls using a questionnaire. The study recommends a phenomenological approach which is particularly effective at bringing to the fore the experiences and perceptions of individuals from their own perspectives. It will help the shopping malls to illuminate the specifics and identify phenomena through how they are perceived by the actors in a situation.

The study also recommends more mixed research method designs for impact evaluations, as qualitative data can enable a richer understanding of how and why strategic capacity management can influence service quality.
REFERENCES


APPENDICES

Appendix I: Questionnaire

TOPIC: STRATEGIC CAPACITY MANAGEMENT ON THE SERVICE QUALITY OF THE SHOPPING MALLS IN NAIROBI COUNTY, KENYA.

This questionnaire is administered on tenants of the sampled shopping malls in Nairobi County. The information to be given in this questionnaire will be confidential and purely for academic purposes.

The questionnaire aims to answer the questions: - what is the effect of matching supply with demand on service quality of the shopping malls in Nairobi?; how does forecasting future demand affect service quality of the shopping malls in Nairobi?; and what are the capacity management strategies used by shopping malls in Nairobi?

SECTION A: DEMOGRAPHICS
(Fill in the blank spaces and tick once in the below given choices of all questions)

1. Please indicate your age bracket?
   20-29 years [ ]
   30-39 years [ ]
   40-49 years [ ]
   Above 50 years [ ]

2. Gender: Male [ ]
   Female [ ]

3. Education level:
   Masters [ ] Certificate [ ]
   Bachelor’s degree [ ] others (specify)…………………………
   Diploma [ ]

4. For how long have you been a tenant in this mall? ………………………………

5. What is the type of business? ………………………………..
In this section please state the most appropriate response for each of the statements in the table below.

7. The following are some of the matching capacity strategies that can be employed by the shopping Mall. What is your level of agreement/disagreement on a scale of 1-5: 5 - Strongly agree; 4 - Agree; 3 - Neutral; 2 - disagree; 1 - strongly disagree)

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>The shopping mall alters the number of service providers during peak times to meet the customer demands</td>
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<tr>
<td>The shopping mall employs part time staff on part time basis during periods of increased demands</td>
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<td>The shopping malls shares facilities that are idle with the other sections of the mall that are in need of the spare capacity.</td>
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<td>The shopping mall adopts “do it yourself procedure” to tenants and this releases various resources to be utilized at different levels</td>
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<td>During periods of high demand for services by the customers- both internal and external customers, the shopping mall offers overtime facilities to its staff to cope with the increased demand</td>
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<td>The shopping mall continuously trains and develops its employee to improve their capacity to handle more than one task at a time</td>
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<td>The Mall engages different contractors in service provision to the establishment and its customers</td>
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<tr>
<td>Sub-contracting of services by the mall has led to the loss of control over the service process</td>
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<td>The use of experts in areas such as taxation, treasury and operational decisions enables the mall to deliver quality services to its clients and therefore increase its competitiveness</td>
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<td>The mall shares some of its equipment such as servers with other firms to reduce its operational cost.</td>
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8. What other matching capacity strategies does the shopping mall employ? Please expound
SECTION C: FORECASTING FUTURE DEMAND EFFECT ON SERVICE QUALITY OF THE SHOPPING MALLS IN NAIROBI

9. The following are some of the forecasting capacity management strategies that can be employed by the shopping mall. What is your level of agreement/disagreement on a scale of 1-5: 5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree)

<table>
<thead>
<tr>
<th>Statement</th>
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<th>2</th>
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<tbody>
<tr>
<td>The Shopping Mall management charges different price for space that is strategically located in the same floor</td>
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<tr>
<td>The shopping mall requires customers to wait for the service in a queue and this improves the quality of services offering</td>
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<tr>
<td>The staff in the shopping mall are always rescheduled to increase the service levels at any given time in the mall and can be moved from one point to a point where there is a deficit</td>
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<tr>
<td>The shopping mall strives to understand what suffers the customer to establish whether the front line staff have a role to play</td>
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<tr>
<td>The management aims at improving the size of the service delivery point to its customers by pursuing acquisition of spaces facility in the nearby buildings and floors to meet the customers demand</td>
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<tr>
<td>The shopping mall offers limited number of services and encourages self-service by the customers</td>
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10. What other forecasting capacity strategy does the shopping mall employ in effectively managing its capacity? Please expound

…………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………

SECTION D: CAPACITY MANAGEMENT STRATEGIES USED BY SHOPPING MALLS IN NAIROBI

11. Has your Shopping Mall been employing different approaches to manage its space and in the process influence customer level of satisfaction?

Yes ( )

No ( )

12. What is your level of agreement/disagreement regarding the capacity management strategies being implemented in your Shopping Mall, on a scale of 1-5: 5- Strongly agree; 4-Agree; 3-Neutral; 2- disagree; 1- strongly disagree)

60
<table>
<thead>
<tr>
<th>CAPACITY MANAGEMENT STRATEGIES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shifting Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offloading Capacity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Sub-Contracting Capacity</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

13. Any other capacity management practice that the shopping Mall employs in the Mall? (State)…………………………………………………………………………………………………..

THANK YOU FOR YOUR COOPERTION!
### Appendix II: Timeframe

<table>
<thead>
<tr>
<th>NO.</th>
<th>Activity</th>
<th>Month</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identifying the Research Topic</td>
<td>April</td>
<td>2018</td>
</tr>
<tr>
<td>2.</td>
<td>Writing Chapter One</td>
<td>May</td>
<td>2018</td>
</tr>
<tr>
<td>3.</td>
<td>Writing Literature Review</td>
<td>June</td>
<td>2018</td>
</tr>
<tr>
<td>4.</td>
<td>Writing Chapter Three</td>
<td>July</td>
<td>2018</td>
</tr>
<tr>
<td>5.</td>
<td>Proposal Draft one Submission</td>
<td>July</td>
<td>2018</td>
</tr>
<tr>
<td>6.</td>
<td>Proposal defense</td>
<td>August</td>
<td>2018</td>
</tr>
<tr>
<td>7.</td>
<td>Address the Panel Comments/Corrections</td>
<td>September</td>
<td>2018</td>
</tr>
<tr>
<td>8.</td>
<td>Submit for Supervisor Review</td>
<td>October</td>
<td>2018</td>
</tr>
<tr>
<td>9.</td>
<td>Data collection</td>
<td>October</td>
<td>2018</td>
</tr>
<tr>
<td>10.</td>
<td>Data coding &amp; analysis</td>
<td>October</td>
<td>2018</td>
</tr>
<tr>
<td>11.</td>
<td>Compilation of the final report</td>
<td>November</td>
<td>2018</td>
</tr>
<tr>
<td>12.</td>
<td>Submission of Dissertation to USIU-Africa</td>
<td>November</td>
<td>2018</td>
</tr>
</tbody>
</table>
Appendix III: List of Shopping Malls In Nairobi

<table>
<thead>
<tr>
<th>No.</th>
<th>Shopping Mall</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Capital Centre - Mombasa Road</td>
</tr>
<tr>
<td>2.</td>
<td>Galleria Mall – Karen</td>
</tr>
<tr>
<td>3.</td>
<td>Garden City Shopping Complex</td>
</tr>
<tr>
<td>4.</td>
<td>The Green House Mall - Ngong Road</td>
</tr>
<tr>
<td>5.</td>
<td>Greenspan Mall Donholm</td>
</tr>
<tr>
<td>6.</td>
<td>Highway Mall - Mombasa Road</td>
</tr>
<tr>
<td>7.</td>
<td>The Hub Karen - Karen</td>
</tr>
<tr>
<td>8.</td>
<td>The Junction - Dagoreti Corner</td>
</tr>
<tr>
<td>9.</td>
<td>Karen Shopping Centre - Karen</td>
</tr>
<tr>
<td>10.</td>
<td>The Mall - Westlands</td>
</tr>
<tr>
<td>11.</td>
<td>Mountain Mall - Kasarani</td>
</tr>
<tr>
<td>12.</td>
<td>Nakumatt Lifestyle - Ngong Road</td>
</tr>
<tr>
<td>13.</td>
<td>Prestige Plaza - Ngong road</td>
</tr>
<tr>
<td>14.</td>
<td>Sarit Centre - Westlands</td>
</tr>
<tr>
<td>15.</td>
<td>T-Mall - Nairobi West</td>
</tr>
<tr>
<td>16.</td>
<td>Thika Road Mall - Thika Road</td>
</tr>
<tr>
<td>17.</td>
<td>The Village Market - Gigiri</td>
</tr>
<tr>
<td>18.</td>
<td>Nextgen Mall - Mombasa Road</td>
</tr>
<tr>
<td>19.</td>
<td>Westgate Shopping Mall - Westlands</td>
</tr>
<tr>
<td>20.</td>
<td>Yaya Centre - Kilimani</td>
</tr>
</tbody>
</table>

Source: Nairobi City County Licensing Department, NCCLD, (2017)