

**THE SIGNIFICANCE OF CORPORATE STRATEGY ON CAPITAL  
BUDGETING PRACTICES IN PRIVATE NOT FOR PROFIT  
HOSPITALS IN KENYA: CASE STUDY OF AGA KHAN  
UNIVERSITY HOSPITAL, NAIROBI**

**BY**

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## **DECLARATION**

This research project is my original work and has not been presented for the award of a degree in any other university or any other higher learning institution for examination purpose.

Sign----- Date-----

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This research project has been submitted for examination with my approval as the university supervisor.

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## **DEDICATION**

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

AKUH, N:	Aga Khan University Hospital, Nairobi
ARR:	Accounting Rate of Return
CAPM:	Capital Asset Pricing Model
CCN:	City Council of Nairobi
DCF:	Discounted Cash Flow
GOK:	Government of Kenya
IRR:	Internal Rate of Return
NFP:	Not for Profit
Non-DCF:	Non Discounted Cash Flow
NPV:	Net Present Value
NSE:	Nairobi Securities Exchange
PEs:	Public Enterprises
PI:	Profitability Index
PBP:	Payback Period
PZP:	Princess Zahra Pavilion
RBV:	Resource Based View
SPSS:	Statistical Package for Social Sciences
WACC:	Weighted Average Cost of Capital
WASREB:	Water Services Regulatory Board

## **ABSTRACT**

Real investment decisions are not made in a vacuum; they are embedded in a company's strategy. However, with inadequate capital amount and an ostensibly infinite request for capital investment in the hospital sector ensuring that there is an organized procedure assist firms make informed capital investment decisions. Therefore, using strategic objectives in determination of capital budgeting techniques to be adopted by a firm is a critical part of ensuring sound investment. This study therefore sought to establish the capital budgeting practices applied by Aga Khan University Hospital, Nairobi, given the influence of hospitals strategic agendas as well as other factors that affect the choice of the capital budgeting techniques used. The key objective being to establish whether corporate strategy has an impact on capital budgeting techniques employed by not for profit hospitals. The study was an in-depth descriptive case study of Aga Khan University Hospital, Nairobi. Content analysis was used to analyze data that was collected through structured interviews. The interviews were conducted on twenty of the twenty-seven targeted respondents achieving a response rate of 74%. The data analysis involved familiarization through listening to recordings and re-reading the transcripts, coding and generating themes, charting and finally mapping and interpreting of the data. The study findings indicate that corporate objectives have a significant influence on the choice of capital budgeting techniques at the Aga Khan University Hospital, Nairobi. The research determined that NPV, IRR, PI and Payback Period are the main capital budgeting methods used by Aga Khan University Hospital, Nairobi with the hospital strategic objectives having a strong impact on the choice of this methods. It was also established that Government policies, political environment, technology, human capital availability, funding constraints, interest rates, inflationary conditions, management perception, taxation, nature and criticality of the project and management risk reservation affected the choice of capital budgeting technique used. The study recommends that not for profit hospitals utilize their strategic objectives to determine the capital budgeting techniques employed by their institution. The study also recommends that large and multinational NFPs restructure their organization structure to cut on the bureaucratic processes. In conclusion, it is recommended that the strategic objectives of the NFPs hospital should be considered in tandem with other factors affecting capital budgeting techniques in this institutions.

# CHAPTER ONE: INTRODUCTION

## 1.1 Background of the study

Organizations associate capital investments with actual expansion and survival in the developing and multifaceted economic environment. Capital budgeting choices are however dependent on the structure and purpose of the organization which could either be public, private, profit or nonprofit firms. Public enterprises (PEs) are widely believed to consider other factors that may not necessarily be purely monetary, when analyzing their capital investment options. However, the private entities tend to concentrate more on pure financial viability on their investment decisions, without much consideration of other factors (Eljelly&Abuidris, 2001).

Developing budgets and in particular capital expenditure plans, is a critical part of running a hospital effectively. Capital budgeting has become an important strategic function for hospitals. Hospitals are facing fierce competition within their sector which has forced them to identify attainable alternatives for mitigating against competition and establishing the best alternatives to accomplish the goals of the organization. When hospitals allocate capital funds in an effective manner across projects in building and maintenance, medical and ICT equipment this can be a true competitive advantage. However, organizations are still deficient of tools and mechanism required to streamline the process of initiating, appraising and endorsing new capital projects in a manner that aligns and supports the organization's strategic purpose.

Hence, capital investment decisions are major decisions for financial managers in any organization. It involves large cash outflows into projects that are long term in nature and mostly cannot be reversed. It is therefore essential that logic and permissible techniques are used to reduce the level of inaccuracy in these investment choices that are meant to maximize the wealth of shareholders (McLaney, 2006). Given the enormous investment expenditure associated with capital projects, it is crucial for organizations to recognize and utilize feasible options of assessment in their capital budgeting planning.

### **1.1.1 Corporate Strategy**

The term “Corporate Strategy” refers to strategy used by different firms in the private, public & Non-profit sectors as well as firms of all sizes whether large or small. Strategy signifies action and decision-making which involves being considerate of the environment in which a firm operates. (Porter, 1996) further defined strategy as being special and intentionally choosing an unusual set of activities to deliver a distinctive blend of value. According to (Certo & Peter, 1988) strategic management is a continuous, iterative process that purposes to keep an organization as a whole significantly aligned to its environment.

Therefore, it is justifiable to say that all organizations have strategies. (Moore, 2000) argued that a firm had a plan whenever there was a dedication to a vision which supported how the firm was going to run in order to generate value and maintain itself in the future. Strategic objectives of NFP hospitals are usually pinned on providing health care services to the community at large. However, limited resources, geo-politics and differing ideologies are known to limit strategic choices and actions in NFPs (Johnson, Scholes, & Whittington, 2008). Hence, to sustain themselves in commerce, NFP hospitals are using fresh executive thoughts and are becoming more commercial. (McDonald, 2007) further divulged that to survive in a dynamic and changing environment that is highly competitive nonprofits must operate like commercial firms by using complicated administration tools to attain sustainable performance targets while pursuing their strategic objectives.

### **1.1.2 Capital Budgeting**

Capital budgeting is defined as the investment decision on whether a project is worth doing or not. As (Quirin, 1967) put across capital budgeting is a defined method for investing existing amount of money more proficiently and meritoriously to make future cash flows in the long term. (Segelod, 1998) also expounded on capital budgeting describing it as being the techniques, methods, procedures and routines engaged in order to recognize capital investment chances, evolve preliminary thoughts into detailed investment projects, appraise and choose projects while ensuring control in the investment projects.

Capital budgeting methods are usually split into two categories famously known as DCF or non-DCF methods. In the category of DCF methods net present value and internal rate of return are the main participants, whereas PBP and ARR are considered as main non-DCF methods. NPV is the most commonly used method to evaluate investment projects under the DCF methods, however, non-DCF methods are preferred for being less complicated but are least accurate of the two methods (Brealey and Myers, 2003). Haka et al. (1985) has further classified DCF & non-DCF into two basic categories commonly known as naive and sophisticated evaluation techniques. The complicated techniques are subject to risk adjusted discounted net cash flows. Therefore, time value of money, cash flows and risk are an important component of this technique. Sophisticated selection techniques are mainly dominated by NPV, IRR and PI. Naive methods on the other hand do not consider cash flow and use present value while incorporating risk in an organized way. Naive selection techniques are predominantly dominated by ARR and PBP methods.

More organizations are using sophisticated capital budgeting to make investment choices according to scholars who have established this over the years (Maroyi and Poll, 2012; Baker et al., 2011; Mustapha and Mooi, 2001). However, sophisticated capital budgeting techniques are considered to be more complicated, and firms resulting to them end up incurring more effort, time and cost (Miller and Waller, 2003; Busby and Pitts, 1997). But given uncertainty sophisticated capital budgeting methods are more desirable since the costs sustained by the firm are well compensated by achievements from good investments (Verbeeten, 2006). IRR, NPV, PI, PBP and ARR have been confirmed as the commonly used methods of capital budgeting by hospitals through surveys conducted. (Cleverly & Felkner, 1982) clearly observed the rise of the proportion of hospitals using formal methods for capital budgeting through their surveys.

However, payback period method still dominates as a selection criterion despite the DCF-based methods gradually making headway in the health industry. The reason why hospitals especially, NFPs still consider the payback period method has been explained by (Smith, Wheeler, and Wynne, 2006) who ostensibly argued that on average hospitals are smaller compared to most industrial companies of the same level. This is one of

reasons why hospitals use payback period their small size. The utility function of NFPs is not maximized by profits but is optimized by achievement of its mission and therefore a payback period method is more preferable in this circumstance (Dittman and Ofer, 1976; Reiter, Smith, Wheeler and Rivenson, 2000). Given the high degree of obsolescence on assets that largely make up the bulk of investments in the healthcare industry, payback period method still stands out as the preferred option over the DCF-based methods.

Finally, (Ho, Chan and Tompkins, 2003), came to the conclusion that the supremacy of payback period method in hospitals despite being conceptually inferior to other capital budgeting techniques insinuate that hospital management prefer simplicity. Furthermore, given the restricted access to the funds markets for example public markets and growing pressure for mergers in this era, hospital administrators are more worried about salvaging their initial investment cost. Hence payback works well in this scenario since it acts as a fast pointer regarding the risk and liquidity of the investment projects being undertaken.

### **1.1.3 Corporate Strategy and Capital budgeting as a strategic tool**

Real investment decisions are not made in a vacuum; they are embedded in a company's strategy. In order to effectively adapt the capital budgeting process to meet the strategic objectives of organizations, they need to give an account for the year's planned investments. This allows firms to quantifying the effect these will have upon the business creating a feedback loop that gives the leadership of the organization useful information for making strategic decisions. For example, if the firm cuts back excessive capital buffers through more precise planning it would significantly improve the process. According to (Chandra, 1987) the budgeting method used often has many behavioral outcomes in the firms planning process that include improved goal congruence and more worldwide participation.

### **1.1.4 Hospital Industry in Kenya**

In Kenya there are 9,630 registered and functional health facilities spread across the country. Most of the facilities are in a poor state due to inadequate and dilapidated equipment and fall short of the international norms and standards. However, rapid changes in the health sector have seen prioritizing of more investments in health infrastructure

through establishment of specialized centers of excellence for the East African region. Other efforts include provision of specialized equipment that offer specialized services (MOH, 2016).

### **1.1.5 Aga Khan University Hospital, Nairobi**

The Aga Khan University Hospital, Nairobi (AKUH, N), established in 1958, is a private, NFP that is financially self-sustaining. It provides health care services both at the tertiary and secondary level to the people of East Africa and mainly Kenya. Through its highly developed amenities and high-tech technologies AKUH, N has set the bar for thorough healthcare and current medical education in East Africa. It has also earned the reputation of being one of the best medical institution and teaching hospital in the region, and beyond. (AKUH, N, 2015).

Major projects undertaken by AKUH, N include the partnership with the Agence Française de Développement (AFD) to establish a world class Heart and Cancer Centre that was opened in 2011. At a cost of over US\$ 50 million, the Centre is providing care and treatment comparable to the best Centre's in the West. The state-of-the-art facility houses modern diagnostic equipment and the latest therapeutic and rehabilitation services. (Aga Khan Foundation, 2016).

The Construction of Princess Zahra Pavilion, a private wing of the hospital equipped with state of the art technology in 2003. PZP is an esteemed centre that caters for in-patient which was named after Princess Zahra, who is the eldest daughter of His Highness, the Aga Khan. It was built at a cost of Sh1.2 billion with a bed capacity of 61-beds, executive suites and a private entrance. (Sunday Nation, 2003)

## **1.2 Problem Statement**

However, with inadequate capital amount and an ostensibly infinite request for capital investment in the hospital sector, where to correctly allocate capital is a matter that demands a high level of teamwork and involvement across key financial, operational and clinical stakeholders. Ensuring that there is an organized procedure put in place can assist the firm make accurate decisions. Hospital administrators have realized that those who

turn out to be entrepreneurs have the idea and capability to accomplish projects and will always be compensated (Kazemek and Grauman, 1989). However, finance teams are frequently faced with opposition at each stage in the process of capital budgeting, as well as at the stages of capacity modeling, evaluating and comparing requests and finally tracking ongoing capital. These processes are demanding more well-organized coordination in order to ensure that investments are done in the right areas that give the utmost return while supporting the overall hospital strategy.

Studies have been conducted to ostensibly determine the capital budgeting methods used by companies across the Globe, particularly in the advanced and emerging countries. Notably, studies have been conducted in the United States of America on capital budgeting norms by large corporations. (Klarman, 1974) explored the cost efficiency and cost benefit analysis methodologies for capital planning in hospitals. (Feldstein, 1993) explained the techniques to formulate budget plans for hospitals. (Lee, 1971) proved the difficulties of allocation of resources through traditional methods in hospitals. While, (Fuchs, 1972) discussed capital budgeting through the patient satisfaction view.

In the Kenyan context most studies on capital budgeting have focused on other industries not related to Hospitals. For example, the study of city council of Nairobi capital budgeting techniques as used in solid waste management by (Khambo, 2012), financial performance of courier firms in Kenya as influenced by capital budgeting techniques (Titus, 2011) and the association between stock return variation at the NSE and capital budgeting efficiency (Kachila, 2012)

Therefore, the study sought to keenly study the capital budgeting practices of private, not for profit hospitals in Kenya in relation to their corporate strategic objectives. The study aimed at bridging knowledge gap in the area of adoption of capital budgeting techniques in private, NFPs hospitals by answering the following research questions :- What are the capital budgeting techniques employed by Aga Khan University Hospital, Nairobi in order to meet its strategic objectives?; Which factors other than strategic objectives at the Aga Khan University Hospital, Nairobi influence the choice of capital budgeting techniques



used?; The choice of AKUH, N as a case study was deliberate since it is a private, NFP hospital based in Kenya and with significant interest in the healthcare sector of Kenya.

### **1.3 Objective of the Study**

The main purpose of the study was to find out the capital budgeting practices applied by Aga Khan University Hospital, Nairobi, given the influence of hospitals strategic agendas. The study also sought to establish other factors that affect AKUH, N choices of the capital budgeting techniques used by the institution

### **1.4 Importance of the Study**

One of the core activities in a hospital is capital budgeting mainly because of escalating health costs, money limits, and competitive environment among hospitals. Today's highly complex, technical and aggressive health care arena has not made things any better, the masses are demanding that professionals in this industry and hospital administrators provide excellent and quality services at a cost that is reasonably low. Also, with shrinking margins and competing priorities for capital and technology purchases, hospitals should determine best practices when planning their capital budget outlays. Managers must therefore discover new ways to give exceptional results from more restricted resources and this study sought to determine best capital budgeting practice in this limited environment (Strategic Planning).

The study will also be beneficial to AKUH, N as this will inform future capital budgeting decisions of the institution and ensure efficient management of resources. It will also provide insight to the Government of Kenya (GOK) on efficient capital budgeting practices especially with the current Medical equipment leasing program. Academically it will enhance the body of knowledge on capital budgeting practices.

## **CHAPTER TWO: LITERATURE REVIEW**

### **2.1 Introduction**

This chapter critically reviews the existing literature on capital budgeting techniques, their findings and conclusions made.

### **2.2 Theoretical Review**

To discuss this concept of capital budgeting techniques some relevant theories are discussed including the following: utility theory, resource based view theory and Pecking Order Theory.

#### **2.2.1 Utility Theory**

Expected utility theory is explained as being choices made coherently and consistently by (Einhorn and Hogarth, 1981) while weighing outcomes by their probabilities. The maximum utility alternative is chosen. The theory bases its tenets on the method that occurs when choices are made under uncertainty and risk and it includes uniformity of preferences for options. The fundamental tenets of this theory are formed on linearity in allocating of decision weights to substitutes and judgment in reference to a fixed asset position (Kahneman and Tversky, 1979).

The better substitute will always be chosen given the assumptions of expected utility theory. Expected utility theory produces greater utility since it forecasts a partiality for leading options which are at all times selected over those which deliver fewer value. Alternatives offering lower utility are assumed to be rejected by decision makers who rank their preferences. Expected utility theory asserts that decision makers seek multiple outcomes as choices are invariant and as such they are able to go through the difficulties of the problems to define plainly a dominant.

In utility theory, the worth of an alternate is determined by the probability of their occurrence and weighting the utilities of possible outcomes. The alternative that provides the highest payoff is the best alternative. An assumption is made that the alternative with the highest Utility is always chosen. Hence (Eugene, 1995) crowns it by arguing that any

realistic investor would capitalize on his utility and as thus accept only capital projects which earning full utility for him.

### **2.2.2 The Resource-Based View Theory**

Proponents of RBV argue that only important strategies and valuable competencies and resources should be considered as basis of competitive advantage for firms (Barney, 1991). References like strategic assets, distinctive competencies and core competencies have featured prominently signifying the strategically critical resources and competencies that give firms competitive superiority. Strategic assets have been clearly defined as assets that are unique to a firm, tough to imitate and scarce, specialized resources and capabilities that bequeath the firm's competitive advantage (Amit & Shoemaker, 1993).

The theory highlights the fact that the firms force of competitive advantage comes from its internal environment and also the resources that the firm has acquired to compete in the environment. The theory has gained popularity as one of the theories of competitive advantage (Furrer, Thomas, & Goussevskaia, 2008). The origin of this theory can be traced from Penrose (1959), who proposed that the important factors are resources used, deployed and possessed by the firm compared to industry structure.

However, (Wernerfelt, 1984) coined 'resource-based view' the terminology when he regarded the organization as assets or resources tied semi-permanently in bundles in the firm. Barney (1991) supported by maintaining that the resources of an organization are its main source of competitive advantage, he attracted attention to all organization attributes, assets, information, knowledge capabilities and organizational processes run by the organization that allow the firm to improve its effectiveness and efficiency while conceiving and implementing strategies. (Miller and Shamsie, 1996) further classified resources into asset-based and idea-based. Eventually, (Barney, 1991) concluded that organizations that are able to create value using resources not being applied by any competitors can attain competitive advantage.

### **2.2.3 Pecking Order Theory**

The pecking order theory states that firms fund developments with internal source of funds first before resulting to debt, and thereafter debt before considering equity. This is due to

informational asymmetries that occur between the organization and investors concerning the organization's prospects hence causing the investors to undervalue the firm's equity and debt. Information asymmetry is thus considered a substantial hindrance to external financing for NFPs. NFPs therefore are inclined to fund capital growth through operating profits (internal capital) because of information asymmetries.

The theory states that firms prefer to use every part of their retained income before looking for funds from the equity or bonds market due to the somewhat high costs of equity and debt that take over any gains. Analogously, in this view NFPs prefer to fund new capital projects with funds available internally, and result to debt after exhausting its supply of internally available reserves. (Bowman, 2002) postulates that because of reputational concerns NFPs prefer to avoid debt. A possible dilemma of debt for the executives of any business is the probability that if the firm is in distress it will taint their image or the status of their firm. He therefore concedes that such concerns on the firm's image are predominantly essential for NFPs due to their dependence on money from the state and sponsors. These benefactors might perceive a firm in distress as an indication of malpractice and subsequently decrease future funding.

(Denison, 2009), also noted that donors exercise considerable oversight of NFPs especially where large restricted donations are involved (reducing the likely information asymmetry), while on the contrary small donors mostly provide no oversight at all (hence increasing information asymmetry). Further, some NFPs may have benefactors willing to fund a capital campaign, thereby decreasing the necessity to enter debt markets. This option of capital campaign, however, is usually inaccessible to small NFPs that don't have sufficient donor pools, long term planning skills, solicitation tools, cost analysis techniques, and employees dedicated to handling the endeavor. Overall, this theory submits that NFPs have no target leverage and as an alternative prefer internal funding (accrued unrestricted earnings) to external (borrowing) of capital.

### **2.3 Competitive Strategy**

Porter (1985) asserted that for superior performance in any firm competitive advantage is the most critical element of the firm. (Peteraf 1993; Powell 2001) further expounded on

the concept of sustainable competitive advantages through analyzing monopoly rents, ricardian rents or schumpeterian rents. A monopoly rent is generally when there is lack of competition mainly because of protected markets. Ricardian rents produce organization precise resources by internal inputs, intangible and idiosyncratic that includes leadership. Whereas, schumpeterian rents came from the capability of organization to dynamically renew advantages of innovation over time.

Organizations are usually known to make a thorough valuation of their own competitive advantage in the process of formulating strategy, through the use of the five forces ideology in evaluating their external environment based on the porter forces (Porter 1979; 1985). The highly popular porter forces include: obstacles to gain entry into an industry, threat of alternatives, suppliers bargaining power, enmity among competing firms and buyers negotiating power as they were well put by (Porter, 1985). Hence, it was argued that the relative performance of a firm could be explained through its market power.

Market power is derived from monopoly, barriers to entry, and bargaining power as discussed by (Grant, 1991). (Peteraf, 1993) asserted that firms with a monopoly generally have a stronger market standing and therefore would perform better than the rest in the industry. (Grant, 1991) further explained that high barriers to entry for new firms would decrease competition and that better performance would be achieved through higher power to bargain relative to customers and suppliers participating in the industry. Therefore, we can assertively confirm that the porter model allows firms in an organized manner to analyze the current situation of their industry.

However as with any other theory Porter's model does not lack limitation and basically it is because it assumes there is a market that is perfect and static in nature, which is next to impossible in the current complex structures. It is also noted that the complexity of some industries and numerous inter-relationships make it problematic to grasp and analyze using the five force porters model according to (Wang, 2004). Firm-specific rather than industry-specific factors were fronted as the most important determinants of profitability by (Rumelt, 1991).

Whereas (Prahalad and Hamel, 1990) argued from a resource and competence based thought of line arguing that products and market positioning was not the only contributing

factor to sustainable competitive advantages. However, on the contrary other scholars that included (penrose, 1959) and (Rumelt, 1991) disputed Porter's emphasis on industry and highlighted the importance of the (diverse) resources that firms own as the main pillars of advantage over their competitors. They were supported by (Furrer, Thomas, & Goussevskaia, 2008) who also argued that since the 1980s, the attention of research on the topic of managing organizations strategically moved to the firm's internal structure (resources and capabilities) from the structure of the industry. These ideologies lead to the Resource-Based View (RBV) approach discussed above.

## **2.4 Empirical Studies**

(Lazaridis, 2004) conducted a survey in Cyprus of capital budgeting practices adopted by firms. The outcome of sampled organizations indicated 30.19% utilized capital investment techniques when choosing their investment options, whereas 50.94% of the organizations used appraisal techniques for certain kinds of investment above a specific cost level. However, 18.99% of the firms did not utilize any appraisal technique for their investment projects. The study disclosed that 54.43% of projects assessment was done by a basic appraisal method and that 36.71% of the firms used the payback period method. The NPV method was the most preferred at (11.39%) in the techniques that factored value of money given time. The study with regards to the cost of capital which is a significant factor in budgeting methods, demonstrated cost of borrowing was at (30.95%) whereas 3.57% of the firms were of the opinion that establishing the cost of capital does not impact on their earnings. The study concluded that Cyprus small businesses did not use any scientific appraisal methods for their capital investment projects possibly because of lack of understanding of such techniques.

(Hermes, Smid, and Yao, 2005) through an analysis of data from a study of 250 and 300 Dutch and Chinese firms respectively critically reviewed the use of capital investment techniques in firms of these two nations. They did the analysis from a comparative perspective of capital budgeting methods in these countries in order to determine whether matters of economic development had any impact. The empirical review revealed that CFOs in Dutch firms on average utilized more complicated capital budgeting methods as compared to their Chinese counterparts. The divergence between Chinese and Dutch

organizations was determined to be lesser than what was expected given the level of economic development disparity between the two nations, at least with regards to the usage of techniques of approximating the cost of capital and the utilization of CAPM as the technique of approximating the cost of equity this is according to the study findings. It was further determined that the net present value method was significantly chosen by firms based in China whereas the internal rate of return method was preferred among Dutch Organizations.

(Smith, Wheeler, and Wynne, 2006) conducted a survey on CFOs of NFPs hospitals in Michigan to establish how budgets are allocated among routine items and strategic investments. The study findings were that strategic investments were allocated two-thirds whereas one-thirds was allocated to routine items. Further the report indicated that appraisal criteria was established by more than 50% of the respondents before receiving any requests and that they were familiar to the criteria's, 86% of respondents certified that project proposal had guiding principle and uniform formats.

(Gupta, Batra and Sharma, 2007) analyzed the capital planning methods adopted by Punjab industries, and the impact of elements such as amount of funds available, age and the kind of firm, and training and knowledge of the chief executive officer in capital planning matters. The survey was conducted through 32 firms based in Punjab. The study determined that one-third of the organizations had a capital amount surpassing Rs. 100mn. Most of the firms sampled still used non-DCF methods e.g. PBP and ARR. It was also established that only a few firms used DCF, and very few of them used NPV method to appraise new projects. The highly chosen discount rate was determined to be WACC while shorter PBP was the most common risk incorporating method. It was also established that most firms felt that CEO training and knowledge was key in the role of choosing the capital budgeting method for the firm. However, the research did not establish any substantial association between the amount of capital amount allocated and capital investment methods used. Similarly, it was noted that new firms preferred DCF methods than firms that had been long in the market; the same however cannot be said of NPV technique. Therefore, it was determined that age of the firm did not impact on the choice

of capital budgeting method. Finally, no substantial association could be shown between investment appraisal method and the nature of industry.

(Malombe, 2009) carried out a study on the connection between capital budgeting practices and performance of Water Services Boards in Kenya. The key objectives of the study was to establish the capital budgeting methods used by WASREB, to understand the elements that affect the choice of the capital budgeting methods preferred by WASREB and finally to determine the connection between capital budgeting methods and firm's performance. The research was conducted using a descriptive design model. Data was collected through questionnaires whereas statistical Package for Social Sciences (SPSS) was utilized in analyzing the data. Regression analysis was used to determine the connection between performance of WASREB and the choice of capital budgeting method. The study found out that WASREB used NPV, IRR, PI, ARR and PBP as capital investment techniques. The research also determined cost of debt, IRR and ARR on equity invested as factors that influenced capital budgeting decisions. In conclusion, it was established that the capital budgeting methods used had a positive relationship to firm's performance.

(Titus, 2011) assessed the effect on the financial performance that capital budgeting techniques had on courier firms in Kenya. The objective of the study was to determine the capital investment methods applied and their influence on the monetary performance of courier firms. 30 questionnaires were distributed to different courier firms within Kenya majorly private owned excluding Postal Corporation of Kenya (government owned). The research methodology was a causal research design. The study findings showed that scenario analysis was utilized mainly by business executives in evaluating the risk of the firm. The executives also chose cost of equity in establishing the least rate of return for appraising suitable investment projects than WACC or the cost of debts. The leading difficulty in the process was determined to be adjusting for the inflation. In conclusion, it was apparent that substantial association existed between the capital budgeting methods and the financial performance of courier firms.



(Khambo, 2012) researched on the factors influencing capital investment methods embraced on solid waste management by city council of Nairobi. The purpose of the research was to establish how capital investment assessment methods are determined and also find out the most frequently used capital investment appraisal method by CCN. The data was collected with the help of organized questionnaires distributed to the sections of treasury, environment and finance. The questionnaires distributed were thirty (30) in numbers out of which only nineteen (19) were returned. The data was summarized through Descriptive statistics that included the use of percentages and frequencies. Interest rates, funds accessible and solid waste size were found out to be the most regular elements affecting the capital investment techniques used by CCN. The respondents specified that CCN did not have a capital investment policy that was being followed. The research established that the key capital investment appraisal techniques used by CCN were the NPV (58%), IRR (26%) and PBP (11%). It also established that the DCF techniques were the mostly adopted capital budgeting investment evaluation techniques at 75% whereas the non-DCF methods were used 25% of the time. The challenges CCN faced in capital budgeting were as a result of complications in determining the project duration, cash depletion, time period for decision making and measuring of the solid waste as per the study. The study concluded that CCN should purpose to consistently review whether they were in receipt of any significant investment return in addition to their objective of offering a safe and clean environment.

(Irungu, 2014) conducted a study on the connection between financial performance and capital budgeting methods employed by firm's listed at the NSE. The main objective of the research was to scrutinize the capital budgeting techniques utilized in investment evaluation among firm's listed at the NSE, to determine the methods of capital budgeting specifically utilized by firms listed at the NSE while undertaking their firm's investments and also to determine the connection between capital budgeting methods and the monetary performance of firms listed at the NSE.

The study was conducted using a correlation cross-sectional survey research design that is known for clarifying or exploring the presence of two or more variables at a given point

in time. The population was firms listed at the NSE market. Primary and secondary data was used with the primary data being collected through questionnaires administered to the staff directly involved in capital budgeting whereas secondary data was from the financial records of the firms that are published. Data was analyzed using regression analysis that tested the impact of capital budgeting methods on the market performance of the listed firms.

The study found out that PBP, NPV, ARR and IRR were the main methods used by firms listed at the NSE and that no correlation was found between the performance of banks and the capital budgeting methods employed. The study conclusion was that PBP, NPV, ARR and IRR were the capital budgeting methods embraced by firms listed at the NSE and that no substantial relationship existed between the capital budgeting methods used and the financial performance of the firms.

## 2.5 Conceptual Framework of the study

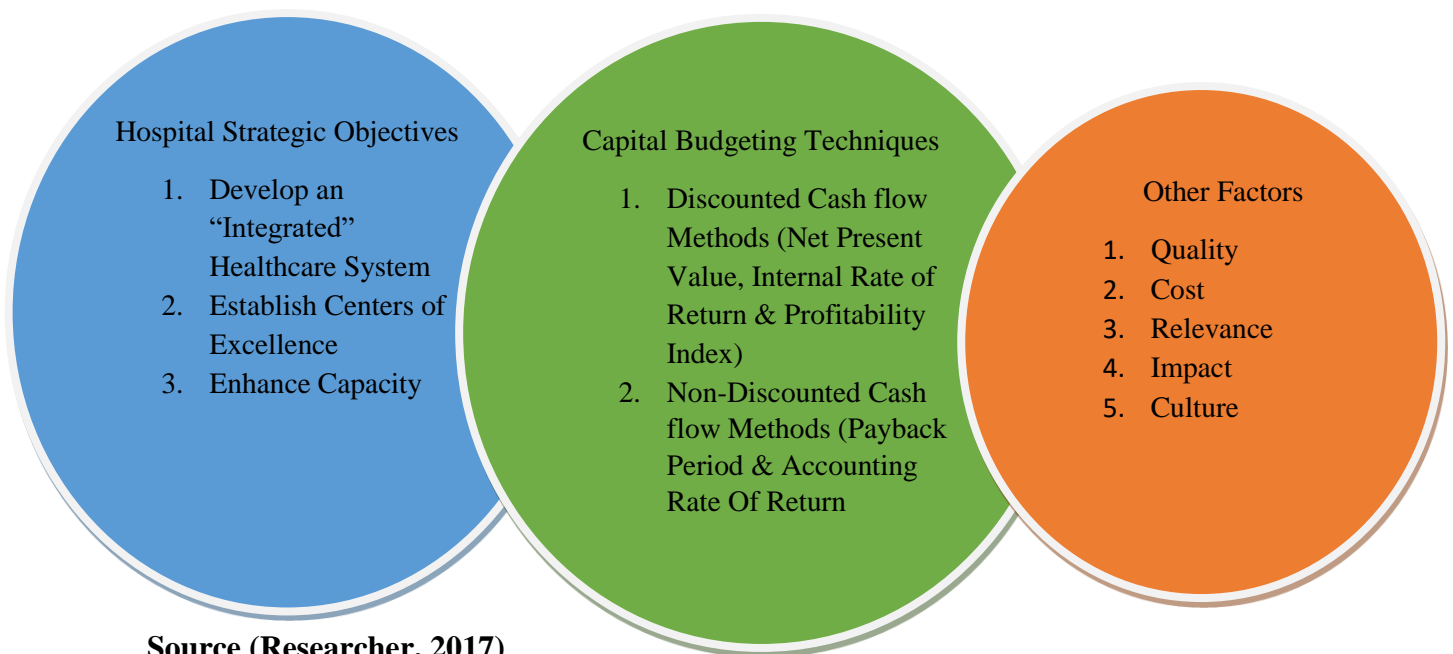


Figure 2.1: Conceptual framework

## **2.6 Summary of Literature Review**

Research on the issue of capital budgeting methods utilized by firms in Kenya and abroad is widely available. However most studies have concentrated on manufacturing firms, industries, government & listed firms as per studies conducted by: (Irungu, 2014) who conducted a study on the connection between financial performance and capital budgeting methods adopted by firms at the NSE, (Khambo, 2012) checked on the factors influencing capital budgeting methods embraced by CCN on solid waste management, while (Titus, 2011) divulged into effect on financial performance as influenced by capital budgeting methods adopted by courier firms in Kenya. Internationally, (Hermes, Smid & Yao, 2006) analyzed the adoption of capital budgeting methods by Dutch and Chinese organizations, (Lazaridis, 2004) carried out a study on the capital budgeting norms of the organizations in Cyprus, (Gupta, Batra and Sharma, 2007) ventured into capital budgeting methods adopted by Punjab industries.

However, little has been done on the issue of capital budgeting techniques in the not for profit organization especially within the hospital industry in the Kenyan market. It is prudent to mention studies that relate to not for profit firms done by (Malombe, 2009) that sought to determine the connection between capital budgeting techniques and performance of WASREB an organization whose main objective is to maximize the welfare of different water consumers. Also (Smith, Wheeler, and Wynne, 2006) conducted a survey on NFPs hospitals in Michigan to establish how funding is allocated between predictable items and strategic investments. Despite these studies, it should be noted that there is scarce research work done on the issue of capital budgeting as a strategic tool to achieving corporate strategy in non-profit making organizations. Given the limited studies done on capital budgeting practices and its relationship to achieving corporate strategy in private not for profit hospitals, it will be intriguing to survey the factors that influence capital budgeting techniques used by firms in respect to corporate strategies.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter describes the methods applied in carrying out the research. It covers the research design, population, sample design, data collection, validity & reliability and data analysis.

### **3.2 Research Design**

The study approach was a descriptive case study. The principle of this approach is that it tries to explain a decision or set of decisions, and the reason why they were chosen, the implementation process, and the outcome (Schramm, 1971). A case study therefore conducts an in depth analysis within a real-world context to understand a current occurrence (the “case”). The approach conducted an in-depth investigation of capital budgeting techniques at Aga Khan University Hospital, Nairobi in respect to influence by hospital strategic objectives and any other formidable factors.

(Yin, 1984) further defines a case study as an empirical review that examines a current occurrence within its actual context especially when the borders between observable fact and context are not openly obvious; and in which case numerous sources of proof are used. Therefore, the qualitative case study approach was preferred because of being able to provide detailed explanation of capital budgeting techniques employed at Aga Khan University Hospital, Nairobi in respect to influence by hospital strategic objectives and other formidable factors.

### **3.3 Population**

The study was undertaken at The Aga Khan University hospital (AKUH), a private tertiary hospital in Nairobi, Kenya. The hospital has in the recent past made significant investments within the region and hence the choice as a case study. The target population of the study included key staff accessible to key information at the departmental level and who have been involved or are preview to the budgeting process (inclusion criteria). The departments included the Department of medicine, Department of surgery, Department of anesthesia, Department of pathology, Department of obstetrics & gynecology,

Department of pediatrics, Department of family medicine, Nursing Division, AKU Dean’s Office, Department of finance (Budget & Planning, Audit & Accounting), Department of human resource, Department of information technology, Department of material management, Department of engineering, Department of hospitality and Department of Marketing/Resource Development. Exclusion criteria included staff that were not permanently employed (staff hired on short term contract) at the institution.

### 3.4 Sample Design

Purposive sampling method was used to allow the study explicitly select interviewees who would generate appropriate data. Purposive sampling is a Non-probability sampling method. According to (Patton, 1990) the main agenda of purposive sampling is to capture ‘information-rich cases for in-depth study’. The study also incorporated snowball sampling strategy to ensure that referrals from the study respondents were followed up for further information. In order to ensure that the study remained focused to its objective criterion sampling was engaged. Therefore, the study targeted 27 participants given the objectives of the study, however by the 20<sup>th</sup> interview data saturation had been achieved where no new information was being generated by the respondents. The sample of 27 people was chosen purposely to represent different age groups, gender and experience within the institutions different departments with management & operational background. Given their pivotal roles at the institution they are considered to be key informants since they handle multidimensional data/information at their respective sections. The sampling plan is as shown below:

<b>Designation</b>	<b>Targeted Staff Numbers</b>
Finance Managers	2
Coordinators-ICT/Finance	4
Executive Assistant-AKU Deans Office	1
Officers-HR, Resource Development & Marketing, MMD, Audit, Librarian& B&P	8
Accountants	2
Departmental Administrative Assistants	10
<b>Total</b>	<b>27</b>

Table 3.1: Sampling plan

### **3.5 Data Collection**

To exhaustively conduct the study, the research employed both primary and secondary sources of data. The primary data was gathered through an interview guide administered to interviewees at their work place during official office hours. The interview guide allowed respondents to provide specifics about important information related to the study. The interviews were conducted using an interview guide that had open ended questions (Appendix I). The participant's signed an informed consent form before the interviews were conducted allowing the researcher to audio record the interviews and transcribe the data (typing everything as recorded, including key headings and reflective notes at the end). Where the respondent was not comfortable with recording the researcher typed the responses during the interview. Secondary data was sourced from the hospital policy documents and reports such as the hospital strategic plan and capital budget reports.

### **3.6 Validity and Reliability**

In order to increase the dependability of the study, it is essential to make evident a relationship between the outcome and the data (Polit & Beck 2004). This is why the study endeavored to describe the analysis process in as much detail as possible. To ensure that data inconsistencies and incompleteness were dealt with, the study used data cleaning methods. The information was also assessed and scrutinized to determine its credibility, sufficiency, practicality and consistency. Triangulation with secondary data from budget reports and reports on strategic plans was used to cross check the validity of data collected from the respondents. Follow up interviews were conducted with respondents to clarify on issues arising that were not clear during analysis.

### **3.7 Data Analysis**

Content analysis techniques was used to analyze the data since the data collected was qualitative in nature. Content analysis is a technique used widely in qualitative research. Content analysis is a technique of analyzing pictorial, spoken or written messages (Cole 1988). It is a research technique for making replicable and valid extrapolations from data to their context, with the aim of giving new insights, facts, knowledge and a real guide to action (Krippendorff, 1980). Krippendorff further explained that as a research method it

is an objective and systematic way of quantifying and explaining phenomena. It is a vital means of giving evidence for a phenomenon where the qualitative approach is used.

Content analysis is used to infer conclusions from the existence of specific words, concepts, themes, phrases or sentences within transcriptions. The analysis involved decontextualizing the data through a coding system, recontextualizing by comparing the information with original data, categorizing through identifying homogenous groups and finally compiling the data by drawing realistic conclusions. This involved familiarization through listening to recordings and re-reading the transcripts, coding and generating themes, charting and finally mapping and interpreting of the data. This research study used words and themes as units to analyze the qualitative interviews that were conducted with twenty members of staff working in different sections of The Aga Khan University Hospital, Nairobi. Content analysis has previous been used successfully by (Wanjugu, 2013 and Kiiru, 2014), who used the method to analyze data collected in a case study of AKUH, N.

## **CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter presents data analysis, findings and discussions as per the objective of the research study. The main objective of the study was to find out the capital budgeting practices applied by Aga Khan University Hospital, Nairobi given the influence of hospitals strategic agendas as well as establishing other factors that affect AKUH, N choices of capital budgeting techniques. The emerging themes that were developed included Discounted cash flow method, Non-discounted cash flow method, integrated healthcare system, establishment of centers of excellence and enhancement of capacity based on repetitions of words (expansion, capacity, specialized services/equipment, cost, quality, access, impact, relevance, bureaucracy, funding, payback period, NPV, IRR, PI & ROI) in the interviews conducted.

The researcher interviewed twenty operational & management staff members who were accessible to key information at the departmental level and who had been involved or were preview to the budgeting process at the institution. This staff were from different departments that included Department of surgery, Department of pathology, Department of family medicine, AKU Dean's Office, Department of finance (Budget & Planning, Audit & Accounting), Department of human resource, Department of information technology, Department of material management, Department of engineering and Department of Marketing/Resource Development giving a response rate of 74%.

### **4.2 Role of Strategic Objectives on capital budgeting techniques at AKUH, N**

The respondents reported that hospital strategic objectives are used to guide capital budgeting techniques at the Aga Khan University Hospital, Nairobi. This is evident through the emerging themes that were developed through the study. The hospital uses a mixture of discounted & non-discounted cash flow methods in their evaluation of capital projects to be undertaken. The institution doesn't use only one method, it uses at least 3 to measure different parameters, Pay-back Period, to establish how many years the institution will need to recover the initial investment, Net Present Value to factor in the future uncertainties, rank various viable projects worldwide and Internal Rate of Return,



to determine which projects meet the internal rate defined by the management. The respondents also noted that capital budgeting process is used for all projects to evaluate their expected results before implementation. Some of the capital budgeting process we use include IRR, NPV, ranking through Profitability Index, Payback and Return on Investment.”

The institution has adopted the discounted & non-discounted cash flow method in order to meet its strategic objectives. The capital budgeting techniques have been used to achieve the strategic objective of an integrated healthcare system through creating outreach clinics and community health programs. The respondents concurred that these facilities serve as “hubs” for the hospitals plan of having an expanding integrated health system in the country, which is committed to providing high-quality health care at a reasonable price to an economically diverse population.

The institution has in the recent years been establishing outreach centres throughout the country to meet growing demand for healthcare services. The opening of this centres requires proper planning as they require massive investment and high cash out flows. This informs the need to carry out feasibility studies where data is collected to determine prevalent conditions so as to establish the kind of investment required. Hence informing decision-making where for example if the location is a residential area the hospital is more likely to establish a children’s/family clinic. This therefore informs management during the planning stage on what is required to open a new centre and through capital budgeting techniques they can determine whether the project is viable.

The institution has also had massive expansion programs where projects like the Princess Zahra Pavilion & Heart & Cancer Centre have been established. They have established centers of excellence for health care provision at the institution, with specialized services and equipment that were previously unavailable locally being made accessible to patients. This has ensured patient accessibility to high quality services through specialized equipment and qualified personnel. However, given the massive investment cost involved in this projects due diligence had to be employed to ensure the project’s success. It was

apparently very clear from the respondents that projects of this nature must be evaluated and must meet certain investment criteria including a positive NPV, an IRR above 200 basis points above the prevailing risk free rate of the economy and a return on investment that is not less than the yearly margins of the organization.

The weight of strategic project appraisal at the institution cannot be ignored, the management scans the environment through use of PESTEL and come up with existing market gaps and does an internal analysis of itself, outlining its strength and weaknesses and matching them with opportunities and threats. To address the opportunities and threats (OT), it comes out with strategic objectives, which are broken down to strategic activities. To address the OT, various projects are appraised using the capital budget techniques and ranked based on their returns and available resources.

The institution has undertaken to enhance capacity with prevailing trends in the health care sector. It should be noted that certain diseases and conditions especially those referred to as lifestyle diseases have been on the increase in Kenya. This has informed the change of strategy in dealing with these diseases as well as investment in modern treatment methods. These developments have necessitated investments in modern equipment including MRI and X-RAY machines which cost millions to purchase. As a result, the institution is tasked in ensuring that it formulates realistic budgets and proper utilization of available resources to ensure in the long run it remains relevant and gains competitive advantage.

During the interviews the relevance and inter-dependability of corporate strategy and capital budgeting techniques was significantly highlighted. The respondents noted that investments are need based and hence they cannot fail/lack future income generations. It was also clear that investments are well planned and structured and a lot of background check and research is undertaken and that this minimizes the sub-optimality of coming up with investments that are not aligned with the institution's overall vision and mission. Finally, the relationship between corporate strategy and capital budgeting techniques was clearly expressed when a number of respondents supported the notion that capital

budgeting techniques are the ones that are beneficial towards achievement of strategic objectives and not the other way round.

The researcher also discovered some unique challenges encountered by the institution in determining the capital budgeting technique given the influence of hospital strategic objectives. It was established that given the techniques of capital budgeting are financial in nature and the organization is a healthcare provider, the tradeoff between projects that are essential such as infection control with projects that have high NPV and IRR is difficult to prioritize. It emerged that big investments cannot be appraised using a single appraisal technique but use a combination of investment appraisal techniques and the techniques measure different and important elements of investment. Estimation of future revenue streams is a big challenge, as the future cannot be predicted with certainty, inflationary implications are not determinable in advance with certainty. Changes in technological advancement are fast and the medical equipment becomes obsolete in a very short span of time and if the revenue generation was over-estimated the project might not recover the initial investment. The process also required well experienced personnel.

#### **4.3 Other factors that determine capital budgeting techniques at AKUH, N**

The other factors that were mentioned by respondents as being significantly important in determining the capital budgeting technique to be used at the institution includes: Government policies, political environment, technology, human capital availability, funding constraints, interest rates, inflationary conditions, management perception, taxation, nature and criticality of the project and management risk reservations.

During the research it emerged that taxation increased the cost of the investment/project and hence more revenue needed to be generated or the initial cost recovery period increased, inflation had the same impact as taxation. Capital, determined whether the institution had the financial strength or could raise debt capital with ease, the future revenue streams determined the capability to service the loans within the approved repayment period. The political climate and the probability of change before recoupment of the investment cost was a major concern. Whereas the nature of the project may be such that it does not necessarily give a financial return and therefore cannot be evaluated,

however, the criticality of the project plays a role in that the essential projects must be carried out in order to meet some regulatory or healthcare standards regardless of the returns. It was also noted that management risk concern would cause some feasible capital investment not to be undertaken given the reservations of the management. Further to management risk reservation bureaucracies delayed project implementation and hence increased project costs as the market prices kept on changing or the budgeting assumptions changed after a certain duration of time and hence the process had to start afresh. The researcher also discovered that turnover of senior management, management and board perception and change of user needs, tastes and preferences were being fronted as other significant factors.

In conclusion, it is critical to note that the investment criteria used in capital budgeting varies from department to department given that healthcare is an essential service and one may not give a great emphasis on the financial returns on the project. Capital budgeting may therefore not be fully applicable to all projects but it still plays a central role in the consideration of the projects to be implemented.

#### **4.3 Discussion**

The literature reviewed identified corporate strategy as being a critical element of any entity in the economic environment. As discussed earlier in the RBV theory important strategies and valuable competencies and resources should be considered as a basis of competitive advantage for firms (Barney, 1991). Porter (1985) had asserted that for superior performance in any firm competitive advantage is the most critical element of the firm. Whereas the expected utility theory projected that any realistic investor would capitalize on his utility and as thus accept only capital projects which earn full utility for him (Eugene, 1995).

The study findings are that AKUH, N uses both discounted & non-discounted cash flow techniques to evaluate their capital investment projects. The methods used includes NPV, IRR, PI and Payback Method. The institution also uses return on investment (ROI) to analyze the viability of its capital projects. The methods were used to achieve the hospitals strategic objectives of developing an “Integrated” healthcare system, establishing centers

of excellence and enhancing capacity. It was determined that strategic plans are the means through which the mission, vision and the objectives of the hospital are achieved. The capital investments made must therefore derive their existence from the strategic plan and should meet the objectives as well as the goals set in the strategic plan. It further emerged that capital budgeting techniques weighed through strategic objectives have an implied effect of causing increase in assets and liabilities and revenue too, it ensures that the management invests on projects that are viable, profitable and the objective promotes on the owner vision, which addresses the human suffering and brings the healthcare to the people.

The findings support existing theory where it has been determined that RBV theory on critical resource is relevant in NFPs strategic planning. This has been supported by the revelation that capital budgeting is strategically used to select viable projects that enable the hospital meet its mission, vision and objectives. This is evident through projects like Heart and Cancer Center, the biggest in East and Central Africa, with state of the art medical equipment. It is also imperative to mention that expected utility works in tandem with the competitive advantage notion to ensure that the techniques used to appraise capital projects deliver the highest utility to the institution while ensuring relevance of investment done to the needs of the patients.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents a summary of the research findings drawn from the findings highlighted in chapter four. The conclusion was focused on addressing the objectives of this study which was to find out the capital budgeting practices applied by Aga Khan University Hospital, Nairobi given the influence of hospitals strategic agendas as well as establishing other factors that affect AKUH, N choices of the capital budgeting techniques. The recommendations of the study are based on the research findings.

### **5.2 Summary of Findings**

The study findings indicate that corporate objectives have a significant influence on the choice of capital budgeting techniques at the Aga Khan University Hospital, Nairobi. The sophisticated (Discounted) and naive (non-discounted) method have supplemented each other in project appraisal with the institution endeavoring to use at least three of the methods in any project appraisal. It was also noted that capital budgeting may not be fully applicable to all projects since Aga Khan University Hospital, Nairobi is a healthcare provider, that is considered an essential service and great emphasis on the financial returns on hospital projects are not prioritized.

The study also determined that other factors that included: Government policies, political environment, technology, human capital availability, funding constraints, interest rates, inflationary conditions, management perception, taxation, nature and criticality of the project and management risk reservation affected the choice of capital budgeting technique used. This factors were significantly addressed by the respondents highlighting their importance. It was noted that certain investments were a requirement from regulatory bodies as well as being essential for the day to day running of the hospital and hence they would supersede the strategic objectives of the hospital. The economic conditions prevalent in the country where interest rates, inflation, taxation and funding took center stage were intensely mentioned as factors affecting the choice of capital budgeting techniques. The people factor did not evade the discussions of the study where factors like

human capital, management perception & reservations were significantly mentioned as influencing the techniques used.

### **5.3 Conclusion**

In line with the research objectives, the results confirmed the significance of corporate strategy on capital budgeting techniques at Aga Khan University Hospital, Nairobi. The research determined that NPV, IRR, PI and Payback Period are the main capital budgeting methods used by Aga Khan University Hospital, Nairobi with the hospital strategic objectives having a strong impact on the choice of this methods. The return on investment (ROI) was also determined to be a strategic tool of determining the capital investments to be undertaken at the Aga Khan University Hospital, Nairobi.

The study concurs with literature reviewed where it had been determined that firm's employ a mixture of discounted & non-discounted cash flow methods in determining their capital investment. Further it agrees with the RBV theory that the resources of an organization allow the firm to improve its effectiveness and efficiency while conceiving and implementing strategies. The study also established other factors within Aga Khan University Hospital, Nairobi that had a significant influence to the choice of capital budgeting techniques. This factors have been broadly categorized into economic and people factors that impact on the operations of Aga Khan University Hospital.

The study concludes that corporate strategy and capital budgeting have a critical relationship that determines the investment undertaken at the Aga Khan University Hospital, Nairobi. It has also established that Government policies, political environment, technology, human capital availability, funding constraints, interest rates, inflationary conditions, management perception, taxation, nature and criticality of the project and management risk reservation affected the choice of capital budgeting technique used. The study also revealed that certain investment projects considered mandatory by regulation and nature of the business superseded the strategic objectives & capital budgeting techniques mandate.

#### **5.4 Recommendations**

The study recommends that not for profit hospitals utilize their strategic objectives to determine the capital budgeting techniques employed by their institution. This should allow this organization to fully harness the benefits of capital budgeting techniques in their organizations. It will also align the strategic objectives of the institution to the operational side of the organization.

The study recommends that the people factor in determination of capital budgeting techniques at the institutions be managed. Based on this research findings management perception has a significant influence on project appraisal and implementation. Therefore, there is a need for this key decision makers to be sensitized on the strategic objectives of the institutions as well as the importance of the capital budgeting techniques in determination of viable projects.

The study recommends that large and multinational NFPs restructure their organization structure to cut on the bureaucratic processes. This will allow the organizations appraise and implement projects within time periods that factor the feasibility reports. This will avoid projects stalling and cost over runs due to changes in prevailing conditions.

In conclusion, it is recommended that the strategic objectives of the NFPs hospital should be considered in tandem with other factors affecting capital budgeting techniques in this institutions. This will allow the organizations to have a holistic view of capital budgeting and make informed decisions that supports the entities mission, vision and objectives.

#### **5.5 Limitations of the Study**

The strict guidelines of the research ethics committee at the Aga Khan University Hospital, Nairobi could not permit the researcher to access certain information that was considered confidential. The researcher was further limited to conducting the study under the Aga Khan University Hospital institutional and administrative regulations in order to observe core ethical standards. However, the researcher was able to address this limitation by using other reliable sources of information including library collections & hospital newsletters.



The respondents busy schedule was another challenge since the interviews were conducted during official working hours. The researcher had to reschedule a number of interviews as well as having to cope with respondents who chose not to participate at the last minute. Some participants could not divulge certain sensitive information due to confidentiality concerns. While others were not comfortable being recorded during the interview. The research was conducted under a time period of three months and this time frame could not allow the researcher to carry out a comprehensive research. However, the researcher used creative people skills to engage the respondents while typing the responses for those who did not want to be recorded.

### **5.6 Suggestions for Further Research**

The research study was conducted as an in-depth descriptive case study of Aga Khan University Hospital, Nairobi. It is therefore recommended that a quantitative study of the research topic be carried out on the not for profit hospitals in Kenya. This will allow for sampling of a number of hospitals within the country to supplement the findings of this study.

The study also recommends that similar research studies be conducted in the private and government hospitals to establish the influence of strategic objectives on capital budgeting in this institutions. This will allow for informed capital investment in this institutions to enable the attainment of providing quality and affordable healthcare to Kenyans.

The researcher also recommends similar studies to be conducted on the role of other factors that affect the adoption of capital budgeting techniques. This could include an in-depth research on the role of people factors for example management perception, human capital knowledge and their influence on the choice of capital budgeting techniques.

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## APPENDICES

### APPENDIX I: Interview Guide

1. What is your current position at the institution?
2. How long have you worked in your current position?
3. What is your involvement in the budgeting process in the organization?
4. Describe the capital budgeting techniques or methods used by the institution?
5. Describe the hospital strategic plans/objectives?
6. How can you relate the influence of hospital strategic plans to capital budgeting techniques used by your organization?
7. What is the impact of factoring the strategic plans on capital investments at your institution?  
Probe: Give examples of investments undertaken?
8. What are some of the benefits of using strategic objectives in determination of capital budgeting techniques?
9. What are some of the challenges encountered while determining the techniques to be used, using the strategic objectives?
10. What other factors affect the choice of capital budgeting techniques at your Institution?
11. Briefly explain these factors and their significance to the choice of capital budgeting techniques used?
12. What is the impact of these factors on the choice of capital investment projects?
13. Are there any other issues affecting capital budgeting techniques at the institution that you would like to discuss?  
Probe: Please, elaborate this issues further?

## **APPENDIX II: Informed Consent Form (Part I)**

**Study Title: The Significance of Corporate Strategy on Capital Budgeting Practices in Private Not for Profit Hospitals in Kenya: Case Study of Aga Khan University Hospital, Nairobi.**

### **Purpose of the Study**

You are being invited to participate in a research project on corporate strategies and capital budgeting practices at the institution. This study will establish the capital budgeting practices applied by Aga Khan University Hospital, Nairobi and how they complement the hospitals strategic agendas. It will also determine other factors that affect AKUH, N choices of the capital budgeting techniques used and how this affects the achievement of the hospitals objectives. Therefore the study will inform on effective capital budgeting practices and hence inform future capital budgeting decisions of the institution and ensure efficient management of resources. The participants will also get a chance to appreciate the capital budgeting process at the hospital as well as the strategic objectives of the institution to allow them serve the institution even better.

### **Potential Harms, Risks, or Discomforts**

There are no known risks to you for participating in this study. Questions will focus on your experiences as a professional working in a private not for profit hospital. Participation in the study is on a voluntary basis and it's at your discretion to choose to participate or not. You do not need to answer questions that you do not want to answer. At any time throughout the research process, you may withdraw without any adverse consequences or questioning.

### **Potential Benefits**

Other than having an insight of the best practices of capital budgeting to the respondent, there are no immediate benefits in monetary or non-monetary terms. However, the findings may contribute towards adding new knowledge in the context of better informed capital investment decision for the organization with regards to achieving hospital strategic objectives. The participants will also get a chance to appreciate the capital budgeting process at the hospital as well as the strategic objectives of the institution to



allow them serve the institution even better. Additionally, a copy of the final thesis will be shared with the institution through the library for your reference in future. Finally, study results will be disseminated at the University of Nairobi library and their repository for review by other scholars in their quest to broaden knowledge.

### **Confidentiality**

The interviews will be conducted in a private room, recorded (with respondent's approval) and transcribed. In case of discomfort with recording the researcher will type the responses throughout the interview. However, all personal information will be kept confidential. Your name will not appear in the final thesis nor other reports related to this study. The transcripts and digital recordings from the interviews will be secured with passwords and those that require storing locked in secure cabinets with access limited to the researcher.

### **Participation and Withdrawal**

The respondent's participation in this study is completely voluntary. The respondents have a choice to be part of the study and can withdraw at any time, even after signing the consent form or partway through the study. If the respondent decides to withdraw, there will be no consequences to them and they will have the option of removing the data already collected. Any complains or clarifications are welcome and can be channelled to the Research Ethics Committee of the Aga Khan University on 020-3662148/1136 or at [research.support@aku.edu](mailto:research.support@aku.edu)

**APPENDIX III: Informed Consent Form (Part II)**

**INFORMED CONSENT FORM**

**The Significance of Corporate Strategy on Capital Budgeting Practices in Private Not for Profit Hospitals in Kenya: Case Study of Aga Khan University Hospital, Nairobi.**

I understand the information given to me about this study. My questions about the study have been answered to my satisfaction. I understand whom to contact if I have any additional questions. I am willing to participate in the study on knowledge management. I understand that all information gathered for this study will be confidential and that I will not be identified in the final thesis and reports. I know that I can withdraw myself and/or my data from the study at any time and without any consequences.

**I agree to participate in this study.**

*I agree that the interview can be digital/video recorded*

*Yes*

*No*

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\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Consent form administered and explained, in person, by:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## APPENDIX IV: Letter of Introduction

University of Nairobi  
School of Business  
Department of Finance and Accounting  
P.O. BOX 30197  
NAIROBI

September, 2017

Dear Respondent,

### RE: BEING REQUEST FOR RESEARCH DATA.

I am a student undertaking a Masters of Business Administration in the field of Finance at the University of Nairobi. As part of my course work assessment, I am required to submit a research project report on "corporate strategy significance on capital budgeting practices in private not for profit hospitals in Kenya: case study of Aga Khan university hospital, Nairobi"

In order to achieve this, your organization has been selected as a case study of my research. Your input through responding to all the enquiries on the structured interview will be valuable in order to generate data required for this study. Utmost confidentiality will be observed to ensure that the information will be used purely for academic purpose and your name will not be mentioned in the report.

Findings of the study, shall upon request, be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance.

Yours Sincerely,

Mwangi, Josphat Wainaina

Karanja

MBA Student – Researcher

Mr. James Mwangi

Lecturer-Supervisor

UNIVERSITY OF NAIROBI

## APPENDIX V: University-Introduction Letter



### UNIVERSITY OF NAIROBI SCHOOL OF BUSINESS

Telephone: 020-2059162  
Telegrams: "Varsity", Nairobi  
Telex: 22095 Varsity

P.O. Box 30197  
Nairobi, Kenya

DATE...30/09/2017

#### TO WHOM IT MAY CONCERN

The bearer of this letter ..MWARUGI JOSEPHAT WAKHAINA .....

Registration No....D61.73944/2015.....

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.

  
**PATRICK NYABUTO**  
SENIOR ADMINISTRATIVE ASSISTANT  
SCHOOL OF BUSINESS



## APPENDIX VI: AKUH, N Research ethics committee clearance



THE AGA KHAN UNIVERSITY

Ref: 2017/REC-87 (v2)  
November 10<sup>th</sup>, 2017

Mr. Josphat Wainaina  
Student - Master of Business Administration  
Reg No: D61/78944/2015  
University of Nairobi

Dear Mr. Wainaina and team,

**Re: THE SIGNIFICANCE OF CORPORATE STRATEGY ON CAPITAL BUDGETING PRACTICES IN PRIVATE NOT-FOR-PROFIT HOSPITALS IN KENYA: CASE STUDY OF AGA KHAN UNIVERSITY HOSPITAL, NAIROBI**

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The Aga Khan University, Nairobi, Research Ethics Committee (REC) is in receipt of your proposal resubmitted to the Research Office on 27<sup>th</sup> October 2017. With reference to our communication Ref: 2017/REC-87 (v1) dated October 24<sup>th</sup>, 2017, the committee records that concerns earlier raised have been adequately addressed.

The committee has granted approval (as per attached official stamped protocol) for this project based on core ethical standards, which have been fully instituted in the protocol. You are authorized to conduct this study from **10<sup>th</sup> November 2017**. This approval is valid until **9<sup>th</sup> November 2018**. You are expected to ensure the protocol complies with relevant institutional and administrative regulations.

The study should be conducted in full accordance with all the applicable sections of the REC guidelines and you should notify the REC immediately of any changes that may affect your research project. You must immediately report any problems involving risks to the participants to the REC. All consent forms must be filed in the study binder. You must provide an interim report before expiration of the validity of this approval and request extension if additional time is required for study completion. You must advise the REC when this study is finished or discontinued and a final report submitted to the Research Office. Further approval from the hospital management should be sought before publishing the results.

If you have any questions, please contact Research Office - [research.support@aku.edu](mailto:research.support@aku.edu) or call 020-366 2148/113.

With best wishes

Dr. Aryn Lakhani, Chairman  
**Research Ethics Committee, AKU (Kenya)**