

STRATEGIC PLANNING AND PERFORMANCE OF CIVIL ENGINEERING

CONSTRUCTION FIRMS IN NAIROBI

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A Management Research Project Report Submitted In Partial Fulfilment of the Requirements for the Degree of Masters of Business Administration (MBA), School of Business, University of Nairobi.

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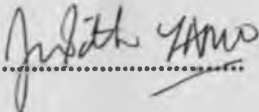
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DECLARATION

I, Judith A. Yamo, hereby declare that this management project is an original work, and has not been presented for a degree in any other university.

Signed:


.....

Judith A Yamo

Date:

26/10/2006
.....

This management project has been submitted for examination with my approval as the University supervisor.

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.....

DEDICATION

I dedicate this work to **God**, - He who began a good work in me, and was faithful to carry it on to completion (Philippians 1: 6); My parents, **Mr and Mrs. Yamo** - firm believers in “all things are possible”; and to my son **Curtis J. Hawi**, - remember always, - **“Do not fear going forward slowly, fear only to stand still.”** - (Chinese proverb).

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Last but not least, to a special group of friends who provided invaluable support in shaping the outcome of this project. Thanks "JK", "LK" and "DM".

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LIST OF ABBREVIATIONS

CSFs	Critical Success Factors
GOK	Government of Kenya
HMS	Highway Management System
KPIs	Key Performance Indicators
KRB	Kenya Roads Board
MOR&PW	Ministry of Roads & Public Works
NTCP	National Transport Policy Committee
R2000	Roads 2000 Maintenance Strategy
RD	Roads Department
ROI	Return on Investment
ROT	Return on Time
SWOT	Strengths, Weakness, Opportunities, Threats
TRL	Transport Research Laboratories

ABSTRACT

The ever changing environment in which industries operate, necessitates an equal need for rapid recognition of appropriate strategies and opportunities to be exploited; threats to be countered and weaknesses to be overcome. Strategies that were relevant in yesteryears are quickly rendered obsolete by constant turbulence in the political, economical, social and technological arenas. Planning has become the axis on which this obsolescence may be countered if organisations wish to remain relevant, and maintain their competitive edge. Methodical planning narrows down contingencies that arise as a result of lack of preparedness or focus, - hence the value of Strategic Planning at different levels of the firm, and an analysis of the outcomes of such planning procedures based on acceptable industry indicators.

Given the above, this study was conducted to establish whether there was a relationship between strategic planning and performance within the Civil Engineering Construction Industry, with the focus on firms based in Nairobi. The study revealed that there were definite aspects of Strategic Planning adopted by Civil Engineering Construction firms, although the extent varied uniquely by firm. The study also revealed that there was a relationship between strategic planning and performance of such firms in the industry. Firms that committed to planning practices such as method statements for

projects, and work plans, and monitoring indicators of change through environmental scanning often had a better project completion prospects than their counterparts whose investment in the same was minimal, haphazard or absent altogether.

A number of implications for policy and practice have been noted as a result of this study, and all underscore the importance of investing in the business of strategic planning for the enhanced performance of both the civil engineering construction industry as a whole, and its stakeholders' ability to deliver quality service in a constantly changing environment. It is proposed that further research on these aspects of strategic planning and performance in this industry be encouraged to assist validate the results of this study.

CHAPTER ONE

INTRODUCTION

1.1 Background

The road network in Kenya was developed as a subsidiary of the railway system. Whereas the railways were useful for the transportation of bulk materials, the road network system acted as the faster link between the railways and the productive hinterlands. At independence, Kenya had a classified network of 41,800 Km out of which 1,811 km were tarmacked. The remaining 39,989 Km were of earth and gravel standard and were subject to closure for certain classes of vehicles during the rainy season (KRB, 2004).

After independence (1963), the Government of Kenya embarked on an ambitious development of roads that spanned a decade. The road network and design has therefore seen massive expansion. There is now a well developed major road network, with most essential links having been completed. This is in spite of the fact that there has been a significant reduction in provision of recurrent financing in the road sector, leading to previously developed roads ageing and deteriorating due to neglect and inadequate funding for maintenance of the existing pavement. There is, however, still a high demand for feeder roads

although in the case of main roads, the emphasis is now changing from construction towards maintenance, improvement of road capacity and overall safety. The advent of the 1990's brought with it a realisation that the poor state of the road infrastructure was impacting negatively on economic and social development. This led to the adoption of strategic reforms for the road sector, with major recommendations being undertaken to address management of existing roads and funding this management (KRB, 2004).

As outlined by TRL (2002), there needs to be in place a universal framework for the strategic planning and performance monitoring and valuation, in order to enhance end result. Such a framework ought to support the planning and implementation of appropriate strategies, with integrated studies related to organisational performance vis-à-vis infrastructural aspects of designing, managing and financing road network development at large. The interface between the turbulent environment, factors affecting organisational performance, and the setting up of appropriate performance indicators needs to be taken into consideration.

The issues raised above point out to a more complex environment in which projects are undertaken. The ability of a government to deliver sound infrastructure whilst at the same time taking into consideration the needs and views of the majority of stakeholders is rooted in sound

strategic management concepts in pre-project planning, project implementation and post-project implementation, performance monitoring and maintenance periods (Barabara Zetu, 1999). There needs to be a coherent strategic plan in place to provide guidance to identified stakeholders, who in turn can then integrate pertinent aspects of such plans, and develop industry specific performance indicators.

1.1.1 Strategic Planning And Performance

Strategy is not formed in a vacuum for an undefined purpose, but its initialisation and formation occurs within a well defined structure. Chandler (1962), discusses the issue of strategy and structure interchangeably, and identifies the nature of strategy as “the determination of the basic long term goals and objectives of an enterprise, and the adoption of courses of action and allocation of resources necessary to carry out the goals”.

Strategy may be defined as the direction and scope of an industry over the long term; which achieves advantage for the industry “through its configuration of resources within a changing environment, to meet the needs of markets and to fulfil stakeholders’ expectations”. (Johnson & Scholes, 1999). Strategy making is a deliberate and conscious activity. Management concerned with strategy making may adopt an “umbrella” mode, setting out broad deliberate guidelines with emergent specifics,

or adopt a process mode, where management concerns itself with setting up frameworks within which the strategy will become operational (design structure, staffing, procedures for managing high technology), but not the actual content of the strategy. Ansoff & McDonnell (1990) reaffirm that “strategy is a potentially very powerful tool for coping with the conditions of change which surround the firm today”. This may be extended to cover an industry at large.

Planning is conscious systematic process during which decisions are made about mission, values, goals, strategies and priorities and activities that an organisation, and by extension industry players will pursue if they are to survive and remain relevant in the future, amidst a constantly volatile environment (Callahan & Haines, 1986).

Strategic Planning is a process that involves the review of market conditions, customer needs; competitive strengths and weaknesses, socio-political, legal and economic conditions; technological developments; and the availability of resources that lead to the specific opportunities or threats facing the organisation (Donnelly et al, 1992). It plays a key role in achieving balance between the short term and the long term. This definition is further reinforced by Grant (1998) who states that Strategic Planning involves decision making about long term goals and strategies, and therefore has a strong external orientation.

Strategic Planning involves processes that enhance informed decision making and decision taking, for the continued survival and relevant contribution at national level, for any industry. Strategic planning therefore, is not a matter of coming up with a detailed plan or program of instructions but it is a “unifying theme that gives coherence and direction to actions and decisions.” (Grant, 1998).

Rue & Byars (1992) define performance is the degree of accomplishment of tasks that make up a job (or project as it were in the Civil Engineering firms), and is measured in terms of results (output). The output further defines how well the firms in the industry are fulfilling the requirements of the project at hand. Performance may be broadly regarded as a record of outcomes achieved over a given period of time, and provides “the strongest linkage to the strategic goals of the organisation, customer satisfaction, and economic contributions.” (Armstrong 2000).

The adoption of agreeable planning strategies, and acceptable performance indicators for all levels of industry players, is akin to protecting the general industry itself - first by enhancement of strengths and maximum exploitation of available opportunities; and second by defence against being marginalised into irrelevance by other competitor industries' who, being aware of their opponent's weakness, at industry level would seek to capitalise on it to their advantage, and be a threat to the latter's continued survival in their industry of practice (SWOT

Analysis). The SWOT analysis in this case is applicable to the whole industry, and may be used to identify strategies needed by the industry (Seamour, Shailer & Xu, 2003). An industry must embrace well defined strategies, or risk becoming irrelevant.

1.1.2 Civil Engineering Construction Industry in Kenya

Construction is essentially a service industry that sells its capacity to produce, in an environment of intense interaction. Buying construction services is a process through time (Winch, 2002). Mintzberg, Quinn & Ghoshal (1999) in strategic and economic terms, define an industry as a landscape of associated markets, isolated from others by blockages in the terrain. For purposes of this study, the industry will be defined as the Civil Engineering Construction Industry in Kenya.

The operations of such firms will be broadly defined as “Civil Engineering Works”, which encompass a wide range of different projects, some of which are of great magnitude (Steeley & Murray, 2001). The Ministry of Roads & Public Works (MOR&PW) provides framework for formulation of policy in the road sector on behalf of the Government of Kenya. MOR&PW is responsible for delivery of Road Works (through registered Contractors), formulation of policy, monitoring and evaluation (supervisory role) of parastatals and departments, setting up of standards amongst other things. To achieve

this mandate, there is the Kenya Roads Board (KRB) whose birth came through the enactment of the KRB Act of 1997, to coordinate the development, rehabilitation and maintenance of the road network through designated agencies. The Roads Department of the MOR&PW is one of the designated road agencies for the management, maintenance, rehabilitation, operation and development of the Class A (International Trunk Roads), Class B (National Trunk Roads) and Class C (Primary Roads).

Table 1: Summary of Classified Road Inventory

Class	Premix	Surface Dressing	Gravel	Earth	Total
A	1,251.12	1,611.77	728.84	94.44	3,686.17
B	349.92	1,263.45	818.57	345.70	2,777.64
C	566.84	2,225.31	3,578.57	1,631.13	8,001.85
D	76.66	1,206.22	5,763.17	4,136.31	11,182.36
E	99.63	546.47	8,236.84	18,007.30	26,890.24
Special Purpose	24.83	114.76	4,923.68	6,288.08	11,351.36
Total	2,369.00	6,967.98	24,049.67	30,502.96	63,889.62

Source: Road Condition And Inventory Survey 2004 (MOR&PW)

Other designated agencies are the Kenya Wildlife Services (KWS), and the District Road Committees responsible for Class D, E, Rural Access Roads and special purpose roads (KRB, 2004).

Like all industries in Kenya, the Civil Engineering Construction industry is constantly embracing changes, occasioned by the turbulent environment in which it operates. The industry's analysis of its position of strengths and weaknesses has evolved beyond vaguely planned notions, to specific concretisation and precision knowledge of its competitive advantages and disadvantages. Various stakeholders have realised the "need to deal with challenges in a more holistic and integrated manner", (NTPC, 2004). This in turn has not only led to the development of a framework to ensure a balanced and focused harnessing and allocation of resources (NTPC 2004), but also the embracing of internal scrutiny as a disciplined approach to assessing strengths and weaknesses of their industry against its most relevant competitors. In the case of this industry, the competitors' would be other service providers such as the Ministry of Health, or the Ministry of Education to mention but just two, that compete for scarce resources generated through annual national budget allocations.

More than ever before, the civil engineering industry in Kenya has as a matter of survival, paused and taken stock of the events within and without their operating environment. This is with the understanding that an underestimation of the significance of the changing environment and its subsequent turbulence, would spell doom for any industry that desires to impact and make quantifiable gains both at operating level and at national levels. Hence it is imperative to incorporate strategy

and strategic modes of thinking such as planning practices, management procedures, implementation and evaluation, throughout industry nerve fibres. According to NTPC (2004), this ensures the application of economic, regulatory, planning and informational instruments to achieve economic, social and environmental goals.

The formulation of Roads 2000 Maintenance Strategy (R2000), the establishment of the Highway Management System (HMS), Road Inventory and Condition Surveys undertaken by the Roads Department (RD), and varied "Twinning" Arrangements with selected donors, all point towards, a positive and commendable effort by MOR&PW, to remain committed to the "systematic practice of innovation - an effort to create purposeful focused change in an enterprise's economic or social potential." (Drucker, 1998).

1.2 Statement of the Problem

No matter the industry, management's approach to strategic planning and performance management must be dynamic, flexible and innovative particularly when confronted with discontinuities and turbulence in its operating environment. The key challenge is to establish whether there is any linkage between Strategic Planning and Organisational

Performance for the firms in industry at large. This will in turn lead to the establishment of acceptable industry performance indicators.

Key Performance Indicators (KPIs) may also be used to establish an objective mode of evaluation and monitoring of critical industry success factors against previously accepted levels of achievement, for setting improvement targets, and to create benchmarks against acceptable industry performance. Benchmarking against industry performance using the lessons learnt leads to overall industry improvements, in the product offered. Better industry players are able to demonstrate that they can differentiate on performance, thereby developing a barrier to poorer performers in the marketplace (CIKPIS, 2006). As far as MOR&PW is concerned, they would then be able to choose better performers using informed information, and to build contracts around incentives based upon performance targets.

Cross - sectional research has been undertaken on Strategic planning for various industries. Karemu (1993) conducted a study on the retailing sector; Wanjohi (2002) conducted a study of the Insurance Industry in Kenya, and Mwaura (2001) conducted a study on Television Companies in Kenya. Although various researches have been carried out within the Civil Engineering Industry in Kenya, none of these have underscored the issue of strategic planning and its relationship to firm performance within the industry. This study therefore, seeks to establish whether

strategic planning processes adopted by Civil Engineering firms, are related to their performance.

The goal of this study is to show that there is a relationship between use of coordinated planning procedures, adoption of acceptable industry performance indicators, and firm performance at industry level. The proposed study seeks to answer the following questions:

- (i) What is the extent of use of Strategic Planning procedures and Performance Indicators by firms in the Civil Engineering industry in Nairobi?
- (ii) What are the benefits accrued through the use of Strategic Planning and adoption of acceptable Performance Indicators by firms in the Civil Engineering industry?

1.3 Objectives of the Study

- (i) To determine the Strategic Planning practice adopted by Civil Engineering Construction firms.
- (ii) To determine whether the Strategic Planning practice of Civil Engineering Construction firms is related to the performance of such firms.

1.4 Significance of the Study

This study may be beneficial to the following:-

- i) The Government of Kenya (MOR&PW), Development Partners, Policy Makers, Stakeholders and Contractors to help them in making sustainable choices for infrastructural provision by choosing better performers. Rationale - there exist research gaps, and there needs to be concerted efforts to establish best practices in roads, civil, mechanical, and electrical engineering projects. Quantifiable measures need to be put in place to ensure that performance aspects of infrastructural construction benefit all the identified stakeholders.
- ii) To academicians, to serve as a stimulus to carry out further research in the same and related areas so as to increase the volumes of existing knowledge, and define concepts related with critical success factors.

CHAPTER TWO

LITERATURE REVIEW

2.1 Strategic Planning

Ansoff & MacDonnell (1990) aver that the study of Strategic Management emerged in the late 1950's and early 1960's, when firms invented a systematic approach to deciding "where and how the firm will do its future business". It was generally recognised that Strategic Management consisted of an analytical dimension referred to as Strategy Formulation; and a process by which managers would jointly formulate strategy referred to as Strategic Planning. Ansoff & MacDonnell (1990) document these shifts in paradigms as Capability Planning , - a shift that was realised in the early 1970's and Issues Management - a shift that gained prominence in the late 1970's as a result of major environmental turbulence.

Lynch (1997) identifies purpose, plans and actions as giving rise to strategy. Strategic Planning must comply with three conditions. First, strategy and plans formulated should be capable of leading to the achievement of goals of the organisation in terms of profitability and growth. Second, they must be consistent with the present or likely future resources of the business, and third, they must not transgress any

of the external constraints or internally generated responsibilities faced by the firm.

The purpose of strategic planning should take into consideration elements of strategy content and value addition. Thompson et al (1998) maintain that planning ought to be focused on the factors within the firm's operating environment. Stoffels (1994) whilst making his contribution to strategic issues management, quotes Professor Donald N. Michael of the University of Michigan as having said that planning has dual purposes, - the first being not so much to control as to enhance resilience and a sense of responsibility both to the immediate and to the indirect stakeholders, thus shedding light on the possibilities and problems of an uncertain world; the second, - to help organisations learn how to move towards this uncertain future, by making enquiries about what direction it wants to take, and how it wants to get there.

Modern day strategic planning has evolved from the original narrow perception of planning based on availability of an infinite resource base from which to tap, to the realisation that scarcity of such resources may be externally induced (politically or physically), to cause constraints to arise. There has been a general turn around from the mentality of "output to input", and the practical sequence for planning is now from inputs to the outputs: first determining the resource availability and

then using it as a guide to formulate the product/service - market strategy (Ansoff & McDonnell, 1990).

Because of its multi-faceted and complex nature, strategic planning particularly in areas of technology requires two way feedback between resource and product or service market. Ansoff and McDonnell (1990) elaborate that strategic planning involves broad processes of identification of Strategic Resource Areas, Strategic Influence Groups and availability of Strategic Information.

Strategies should be industry specific, functional, flexible, and technically superior to maximise return on investments. Companies succeed when strategies adopted for the circumstances they face are feasible in respect to their resources, skills and capabilities and are desirable to the stakeholders (those individuals, both internal and external) who have a stake in hand and an influence over the business. Companies fail when their strategies fail to meet the expectations of these stakeholders or produce outcomes which are undesirable to them thereby giving rise to strategic dissonance.

Strategic Planning ought to be incorporated within the three broad levels of strategy (Pearce and Robinson, 1997) namely,

Corporate Level Strategy - which comprises decisions made by senior managers' vis-à-vis their relationship between the business and the product(s) / service(s) on offer. Emphasis is on the direction, composition and coordination of a "mixed bag" of business portfolios comprising a large and diversified firm. Three core areas of Corporate Level Strategy are strategic analysis providing value for stakeholders, strategy developments for enhancement of interface between stakeholders and the external environment, and finally strategy implementation of content in context of firm operations (Pearce and Robinson, 1997). This involves sound knowledge of a firm's key success factors, the game plan of other players in the industry and a thorough appreciation of implications and repercussions of weighty issues of investment and divestiture in the market.

Business Level Strategy - which comprises decisions concerning the operation and direction of each of the individual businesses within a group of companies (Pearce and Robinson, 1997). Core activities at this level of planning include formation of framework to be adopted for investment strategies mostly in line with Porter's five forces for sustained competitive advantage.

Functional Level Strategy - which comprises decisions concerned with creation of synergies between individual business functions and processes vis-à-vis skills, resources, processes and people i.e. financing,

marketing, manufacturing, technology and human resources, - and how all these can be effectively combined to deliver Level 1 and Level 2 Strategies (Pearce and Robinson, 1997).

2.2 Organisational Performance

Organisational Performance is measured in terms of results (Rue and Byars, 1992). The term performance generally carries with it an understanding of a degree of achievement of an operation or a set of connected operations, in so far as an organisation's goals and objectives are concerned. These operations may have been formally put in place by the organisation to evaluate and monitor the organisation's capability to successfully meet its goals, and assess its employee and stakeholder responsiveness to what has been learned, through the adoption of efficient structures, systems, and capital investments. Performance is the key link between the knowledge flow and the work flow (Sita, 2003).

Objective Key Performance Indicators (KPIs) need to be put in place to monitor processes, and develop measures and criteria to evaluate organisational performance and change, and to report any noted deviations from the organisational expectations. Through this then causes of failure may be addressed, and success enhanced within an organisation.

Like most other industries, construction industry performance is largely dependent on the demands and requirements of its clients. Critical Success Factors (CSFs), indicate those areas of corporate performance that are vital to the successful accomplishment of an organisation's mission (Armstrong 2002). Performance Indicators in this industry are determined by and large along the lines of CSFs similar to those identified by Pearce and Robinson (1997). Alarcón et al (2001) emphasise that studies in other industries have proven, that performance measurement and benchmarking is the cornerstone of challenging any industry to become world class. For the firms within any given industry, their benchmarking initiatives contribute the most towards their change of culture, process, improvement of performance and productivity. This in turn leads to firms being able to identify their performance gaps and opportunities, as well as developing continuous improvement programs for all stages of their process.

Donnelly et al (1992) further identify nine key areas of performance that are also relevant for civil engineering firms. *Market Standing*, which is usually generated from the goodwill of a contractor's name, in their field of operation (i.e. civil works, electrical works, mechanical works, amongst others). Included here is the firm's reputation to deliver projects on time, safely, free from defects, and within the stipulated budget. *Market Share* (Donnelly et al, 1992) - which infers an element of competitive positioning for sustainability. The strategy is to focus on

serving a particular category well e.g. paved roads construction only, gravelling only, bridge construction and drainage structures only. The public sector segment of the market is the most lucrative, and is by far the largest in Kenya today.

Productivity (Donnelly et al, 1992) - which is, - Return on Time (ROT) - or efficiency as measured by the productivity of a Contractor's work force when on a job or undertaking a project e.g. continuous improvement from project construction teams to achieve reductions in costs and project lead times. *Physical, Financial Resources, Raw Materials & Resource location*, - inferring resources on hand, available for exploitation and enhancing competitive advantage e.g. quarries for base material excavations; plant and machinery availability and capability, therefore a cost reduction strategy is enjoyed vis-à-vis their location, alongside maintenance of buildings, equipment, inventory and funds.

Profitability (Donnelly et al, 1992) - which is the firm's ability to maintain a reasonable rate of Return on Investment (ROI) within the industry. *Price competitiveness* - which infers overall cost leadership; ability to establish a position that has significant cost advantage over all its competitors in the industry. This is established through the number of competitive tender bids awarded on contract to implement projects, vigorous pursuits of cost reductions from experience, spelt out in method statement submitted during tender bidding. The key driver of

public sector investment in infrastructural construction and design is donor funding, and therefore there is stiff competition for award of such contracts.

Calibre of Personnel (Donnelly et al, 1992) - relevant key personnel, both local and expatriate, and their academic and professional qualifications, skills, talents, inclinations and their level of experience comprise what is broadly seen as work performance and worker attitude, and Manager Performance and Responsibility, - which enhances competitive advantage. *Information Technology* - access to relevant hardware and software to maximise output, and minimise input, lead times associated with project(s) locations (remoteness and geographical dispersion). The ability of the systems to be used as a primary integrated communication tool also enhances competitive advantage; and finally, *Social Responsibility*, indicating an appropriate response to societal needs and expectations.

Major challenges evident within the Civil Engineering Industry in Kenya have been the choice of the right directions for further growth and sustenance, whilst at the same time harnessing energies of much needed personnel in the new chosen direction, with regard to knowledge management (knowledge creation and utilisation), responsive learning outcomes (through knowledge audits), emphasis of network effects within all levels of the industry, the role of standards within the industry

as a whole and modern financial analysis based on acceptable industry practice (TRL, 2003).

The above may be addressed through adoption of relevant strategic planning, at different industry levels, and through different stakeholders, hence the relevance of this study. This in turn will give the industry a strategic advantage and positioning in an otherwise turbulent environment. Trade-offs between variables will often be required; but superior performance has to be maintained in order for the industry to focus, create sustainability and make gains that enhance its relevance at national levels.

2.3 Strategic Planning And Organisational Performance

Ansoff & McDonnell (1990) state that management is a pragmatic, results oriented activity. A good part of this management comprises strategic planning, *“a logical, analytic process for choosing the firm’s future position vis-à-vis the environment”* which was invented by firms whose managers had sufficient foresight and intuition to understand that failure to realign their firms to the changing environment would lead, not only to the saturation of growth opportunities for their firms, but also eventual technological obsolescence, and irrelevance of their firms.

It therefore follows that all organisations must have a *raison d'être*, hence the value, and basis of having a mission and vision (Donnelly et al, 1992), - a source and channel respectively, through which they may obtain results. Strategic planning when properly installed and accepted by management, produces superior improvements in performance (Ansoff & McDonnell, 1990). From the mission there will then be a hierarchical evolution of a defined set a Critical Success Factors (CSFs). These CSFs, although not normally quantifiable, give rise to the establishment of additional measures, which are required to show whether or not the mission of the organisation has been achieved, and whether their vision is sustainable for the future. These are referred to as Key Performance Indicators (KPIs). KPIs are the modes through which an industry measures its progress, through the establishment of meaningful benchmarks for comparison. KPIs promote long term industry improvements (Alarcón et al 2001).

According to CIKPIS (2006), in order to be in a position to determine the value to place on Strategic Planning and Key Performance Indicators, the first thing an organisation will require to do is to develop measures that are cost effective and make optimum use of existing sources of data and means of data gathering, secondly, to develop measures that provide timely information thereby enabling effective response, and finally develop measures that provide sufficient information and an efficient

system through which to report on both the strategic plans and the indicators on a regular basis.

Industry requirements are constantly changing therefore there is continuous need for strong change tracking (early warning systems to limit risk exposures). According to Bolton (1999) the past 20 years has brought about tremendous change in management and practice of most disciplines, and complete shifts in paradigms in so far as management science in those disciplines is concerned. These changes, - both internal and external, - and the accompanying complexities have decreed the necessity to recognise and adapt to rapid developments, and accelerated response schedules.

Civil Engineering works encompass a wide range of different projects, some of which are of great magnitude. Vast cuttings and embankments, mass and reinforced concrete structures, large structural steel construction, reservoirs, sewage schemes, piling for heavy foundations, harbour works, dry docks, roads, canals and railways, all form the subject matter of civil engineering (Steeley & Murray, 2001). These works require considerable skill, ingenuity and technical knowledge in both their design and construction. The use of new materials and techniques is continually changing the nature and methods of construction used in these projects, and the increasing size and

complexity of these works demand a greater knowledge and skill for their planning, measurement and evaluation (Steely & Murray, 2001).

As a result of the above, even the field of Engineering and Construction has experienced evolution, internal realignment, and readjustment to the forces operating in the external environment. The following three elements have been identified as key, to any construction management system (Bolton 1999). *Pro-activity*, to accommodate changes within the construction environments which are rapid and are accompanied by enormous impacts on profitability and success, such that the system must “drive” the “output”. *Re-activity* reduces the system to sampling results and correcting processes, and mitigating wastage. *Dynamism*, which means being future focused and not static, confined to the here and now. Engage “*inspect*” mode not “*expect*” mode and to bring out any variances to light as soon as they are perceived at each stage.

Bolton (1999) further asserts that fundamentally, a good system should display elements of homogeneity and uniformity. The need therefore for strategic planning practice and performance to be incorporated in Civil Engineering and Construction Industry practice cannot be taken for granted. Planning and performance monitoring along CSFs does not imply control, but an enlargement of the sense of possibilities; not prediction but an enhancement through learning what the external environment is and what it might become; resilience and responsiveness

as the future unfolds into the present. The dynamics of markets and economics creates the links between managerial strategy, firm performance and the environment.

Aspects of strategic planning and performance that require to be effectively managed include production, budget formulation, capital planning, enterprise architecture, budget execution, workforce planning, strategies and programs, and lastly management improvement and related policies (Donnelly et al, 1992). The range of measures ought to be broad enough to cover areas such as performance against organisational objectives, performance against other relevant organisations, and performance against externally imposed indicators.

The ultimate success of firms is dependant on their ability to continuously adjust to the changing environment, and therefore the need to have a strategic plan in place (Mwaura, 2001). The importance of this aspect of strategic management has also been underscored in other cross sectional studies carried out by Karemu (1993), and Wanjohi (2002). To sustain excellence, companies need dual strategies; one for the present and one for the future (Abell 1999).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Scope of the Study

The focus of this study was on various aspects of Strategic Planning and Performance of Civil Engineering Firms operating in Nairobi. A cross sectional study of various aspects of strategic planning and performance was conducted by the researcher.

3.2 Research Design

The research design was a descriptive survey. This method was chosen in order to facilitate an all encompassing reach into this large field of respondents. The aim of the research was to establish whether there was a relationship in the behaviour of civil engineering construction firms operating in Nairobi, with respect to strategic planning which they undertook within the dynamics of their industry, and their performance.

3.3 Population

The target population for this study were the Civil Engineering and Construction firms based in Nairobi. It had earlier been established that

there were a total of five hundred and four (504) Road Works Contractors registered by Ministry of Roads and Public Works (MOR&PW) countrywide as of April, 2005. Of these, One hundred and ninety (190) were listed as being actively operational in Nairobi (See Appendix 3).

3.4 Sampling

A representative sample was picked from the One Hundred and Ninety (190) firms operating in Nairobi. Owing to time constraints the researcher was not able to contact all the One Hundred and Ninety (190) registered firms. Using systematic random sampling, the researcher arrived at a total sample size of forty two (42) construction firms to work with.

Of these forty two (42), eight (8) could not be found at the address that was listed on the MOR&PW list, and neither was there any response on the telephone line contact that had been listed; and six (6) others contacted declined to participate in the study, citing issues such of confidentiality, owing to absence of top management to sanction the study. Out of the forty two (42) contacted, twenty eight (28) responded positively. This represented a 66% response rate.

3.5 Data Collection Method

Primary data was collected using a structured questionnaire (See Appendix 2). The questionnaire was divided into three main parts. The targeted respondent in each of the companies was a Top Manager, Project Manager or a Contracts Manager. Companies were initially contacted by telephone, to obtain the name of the Chief Executive Officer, Project Manager or his equivalent, and an appointment was sought to establish when it would be convenient to have the letter of introduction (Appendix 1) and the questionnaire (Appendix 2) delivered for their attention and subsequent response.

It had been largely anticipated that the questionnaire would be administered through "drop and pick later" method, and this was the case with 82.2% of those who responded. There were however, exceptional cases in which 17.8% of the respondents indicated the need to have the researcher present as they went through the questionnaire, and for these specific appointments were made. Although this was time consuming, it allowed for an interactive session, on the various issues raised with additional observations being noted.

3.6 Data Analysis

The aim of any data analysis is to test for validity, completeness and consistency with the statement of the problem. A data base was therefore prepared to record research outcomes. Tables, charts and percentages were used to represent most of the response rate from the response data. Part of the data was however analysed through the use of mean scores and standard deviations to rank factors being studied in order of their importance, and to determine the differences in degrees to which contractors value each of the factors being examined. Both methods facilitated data summary and computation.

CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents and discusses the findings of this study at considerable length. The findings were analysed and discussed in line with the contents of the questionnaire (Appendix 2), (Wanjohi, 2002). The questionnaire itself was divided into three parts, and the findings of each of the sections were analysed accordingly. Out of an initial sample size of forty two (42) firms contacted, twenty eight (28) responded positively. This represented a 66% response rate. Of those who responded 53.6% were Directors of their firms, 21.4% of the respondents were Contracts Managers or Project Managers in their firms, 18% were top engineers in the technical department for the firms that were studied, 7% of the respondents declined to indicate their positions in the firm on the questionnaire.

4.2 Profile of Respondent Companies

Of the firms that participated in this research, 60.71% have been in the business of civil engineering for more than 20 years, 10.71% have been in the business between 16 to 20 years, 10.71% have been in the business

between 11 to 15 years, 7.16% have been in the business between 6 to 10 years, and 10.71% of the participants have been in the business between 1 to 5 years.

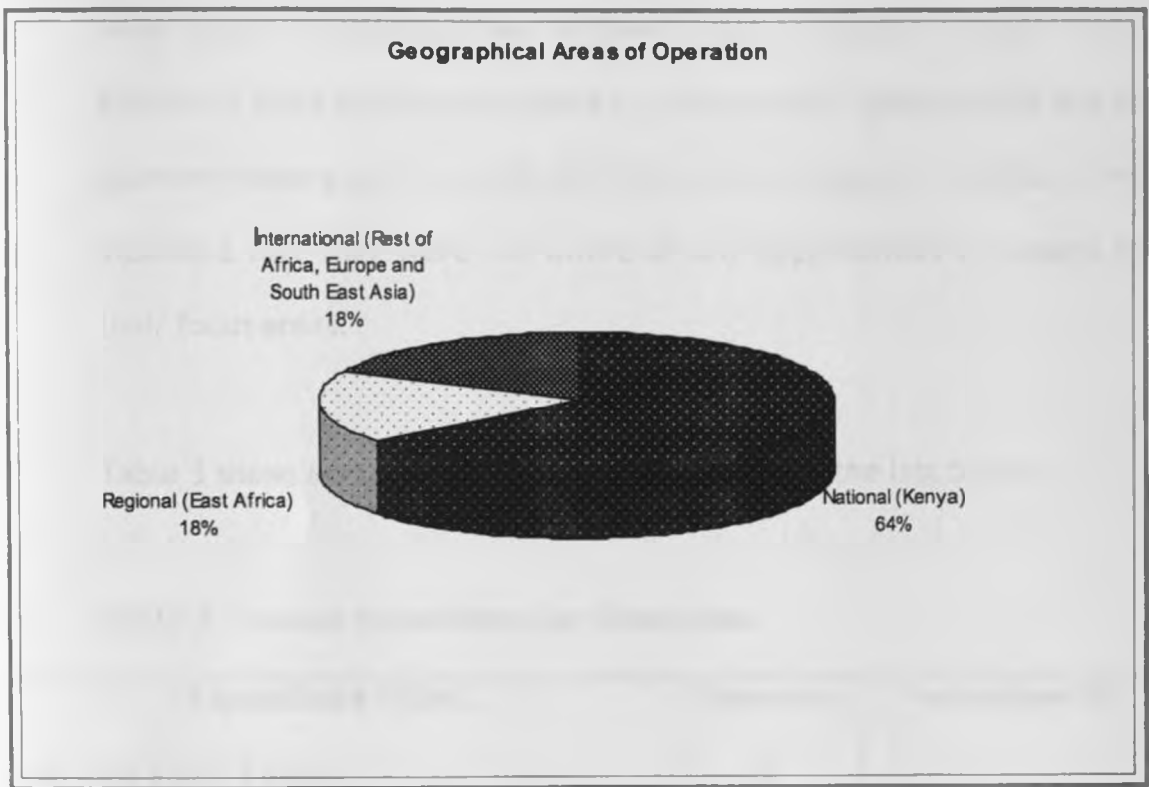
Table 2: Company Ownership

Ownership	Frequency	Percentage (%)
Local (International Affiliation)	7	25%
Local Private	18	64.3%
Foreign	3	10.7%
Total	28	100%

Source: Response Data

Of the above, 64.30% of the participant firms operate nationally (within Kenya only), 17.85% have established regional operations in East Africa (Kenya, Uganda, Tanzania and Zambia), and 17.85% had international representation (other African countries outside of East Africa, Europe and South East Asia).

Figure: Geographical Areas of Operation



N = 28

Source: Response Data

As already noted previously in the literature review, Civil Engineering works encompass a wide range of different projects, some of which are of great magnitude. Therefore out of the list of eight focus areas of operations identified, 32.14% of the participants focus on up to six of the identified operations, 3.57% engage in up to five activities indicated on the list, 14.57%, engage in up to four activities indicated on the list of operations, 28.57% engage in up to three activities indicated on the list, 17.86% engage in up to two activities indicated on the list, and another 3.57% engage themselves exclusively in only one of the activities indicated on the list.

Over 96% of the participants contacted for the study confirmed that they were aware of opportunities for their firms to expand in their focus areas, but were sometimes limited in pursuing such opportunities due to external factors such as time and financial constraints. A total of 4% indicated that they were not aware of any opportunities to expand in their focus areas.

Table 3 shows annual expenditure on operations in the last 5 years.

Table 3: Annual Expenditure on Operations

Expenditure (KShs).	Frequency	Percentage (%)
Less than KShs. 5 Million	0	-
Between KShs. 6 Million and KShs. 10 Million	8	34.78%
Between KShs. 11 Million and KShs. 15 Million	0	-
More than KShs. 15 Million	15	65.22%
Total	*23	100%

Source: Response Data

*Five (5) companies declined to respond to this question; - three cited issues of confidentiality, two had only been in operation for between 1 - 5 years, and so did not have a conclusive pattern of expenditure identified.

Of the respondents, 28.57% have more than two hundred employees, mostly owing to the fact that they constitute 42.86% of respondents who have between four and seven on going projects. A further 32.14% have

between fifty to two hundred employees - constituting 57.14% of respondents who have between one to three on going projects, and 39.29% have less than fifty employees mostly as a result of not having any projects running currently.

4.2.3.3. Categorisation of Employees

Table 4 shows a further breakdown of the category of employees of the respondent firms.

Table 4: Categorisation of Number Employees by Departments

No. of Employees	Projects (Technical)		Finance And Administration		Information Technology		Human Resources	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
5 to 10	19	67.86	17	60.71	21	75.00	22	78.57
11 to 15	1	3.57	4	14.29	7	25.00	6	21.43
16 to 20	3	10.71	7	25.00	0	0	0	0
> 20	5	17.86	0	0	0	0	0	0
Totals	28	100	28	100	28	100	28	100

Source: Response Data

With regard to models of excellence or frameworks for quality standards, or benchmarking tools, 71.43% of the respondents indicated that they subscribed to such models. Within this category, a further 15% had received ISO Quality Standard Certification, in their area of project delivery. A remaining 28.57% from the overall respondents did not

ascribe to any models citing reasons such as lack of relevance, or non applicability of the same in their chosen area of focus.

4.3 Strategic Planning

4.3.1 Mission and Vision

Out of the twenty eight respondents, 71.43% had a vision statement that was documented, 64.29% had a mission statement that was documented. In both cases these were formulated by top management.

4.3.2 Strategy and Strategy Development

Of the firms that participated in the survey, 60.71% indicated that their firms had specific strategic goals, and 39.29% of the respondent firms did not have specific strategic goals.

Out of the 60.71% respondent firms who had specific strategic goals, 52.94% were able to confirm that their specific strategic goals had changed in the last five years, whilst 35.29% had maintained the same strategic goals within a similar period of five years.

Availability of strategic plans was positively acknowledged by 67.86% of the respondents contacted; 25% of the respondents did not have a strategic plan and 7.14% of the respondents did not answer this

question. Out of the 67.86% respondent whose firms have strategic plans, 42.11% indicated that their strategic plans cover a period of five (5) years, 31.58% have strategic plans that cover a period of more than three (3) years but less than five (5) years, and the remaining 26.31% did not give an indication as to the period covered by their present strategic plan.

Again, out of the 67.86% of the companies that indicated that they had strategic plans, 57.89% have their plans documented (formal) and 42.11% do not have strategic plans that are documented (informal); those who formulated their strategic plans in response to the changes they perceived in their operating environment were 52.63%, whilst 47.37% did not necessarily formulate their strategic plans in response to the changes they perceived in their operating environment.

The results of this study indicate that the respondent firms have varying perceptions and indications of what they perceive as the existing threats within their areas of operation. Table 5 shows the results for this part of the study.

Table 5: Perceived Threats in Industry Environment

Nature of Perceived Threat	Frequency	Percentage (%)
A. Corruption	10	35.71%
B. Bureaucracy (Leading to Delayed Payments for Work Already Done and Measured)	8	28.57%
C. Unreasonably Low Rates in Tenders by Competitors	4	14.29%
D. Skewed Tender Procurement Methods (As a Result of (C.) above.)	5	17.86%
E. High Cost of Construction Materials	1	3.57%
Total	28	100%

Source: Response Data

Respondents indicated that 32.14% of work plans were formulated solely by Top Management, 46.43% had their work plans formulated collectively across the Board. The time span for drawing up of work plans varied, with 3.57% of the respondents indicating that they drew up their work plans on a quarterly basis, 20.57% did this of a semi-annually basis, 17.86% had their work plans draw out on an annual basis, and 50% of the respondents specified that they took time out to draw up their work plans as required by individual clients, and / or unique project requirements.

With regard to the interest of stakeholders and how whether or not these were addressed and met, 53.57% of the respondents confirmed that their interests were met through both stakeholder meetings and interactive forums on the one hand in addition to their subscription to the relevant industry stakeholder publications; 7.14% confirmed that the interest of stakeholders was met solely through stakeholder meetings and interactive forums, and a further 25% confirmed an additional forum through which stakeholder interests were met, namely the Project Site Meetings. Of the respondents contacted, 14.29% did not respond to this question, citing reasons of non applicability.

Information collected through the stakeholder meetings and interactive forums, subscription to stakeholder publications, and site meetings was integrated in the work plans of 42.86% of the respondents contacted. A further 35.71% did not integrate this information into their work plans and did not give any reason for not doing so, and the remaining 21.43% did not integrate this information in their work plans as it was not relevant to their scope of operations.

The issue of working with other stakeholders in formulation of all inclusive strategic plans was acceptable to 42.86% of the respondents, as long as they were working in a joint venture operations or in strategic alliances with other firms to achieve a common objective in a common

project; it was not acceptable to 32.14% of the respondents; whilst 25% of the respondents did not indicate their position on the same.

4.3.3 Effectiveness of Strategic Plans

Various factors were considered as determining the effectiveness of strategic plans. Respondent outcomes were evaluated and interpreted in Table 6.

Table 6: Factors Determining the Effectiveness of Strategic Plans

Factors Determining the Effectiveness of Strategic Plans	Mean Score	Standard Deviation
Company Vision	5.60	4.34
Company Mission	5.20	2.17
Objective(s) of Company	5.00	2.45
Company Reputation	5.60	5.77
CEO	4.20	4.42
Nature of Competition	5.20	3.49

N = 28

Source: Response Data

4.3.4 Organisational Performance

Environmental Scanning for purposes of enhancing individual firm performance was practiced by 53.57% of the respondents; a further 10.7% did not engage in any environmental scanning because they deemed it not applicable to any enhancement of their performance in the industry, and an additional 35.73% did not respond to the question, citing a lack of knowledge on what “environmental scanning” was.

Information about competitors in the industry was collected by 57.14% of the respondents; whilst 42.86% did not engage themselves in this activity. Those that collected information about their competitors did so through examining their competitors’ cost structures through previous bids presented for similar projects, or tendering techniques; having knowledge about the responsiveness of various competitors to the tender requirements; acquiring knowledge about nature of their competitors’ compliance history with technical and financial criteria for participation; examining performance track records of their key competitors’ over a given period of time; and taking note of their competitors’ resource capacities such as key technical personnel, plant and equipment, access to natural resources e.g. owning a quarry, and generally their overall resource capacity utilisation abilities.

For 53.57% of the industry, the current industry structure could be used as a reliable guide to the nature of competition and industry performance in the future; this is contrary to 46.43% who did not think that the current industry structure could be used as a reliable guide to the nature of competition and industry performance in future.

The study also noted that respondents had identified precise areas where they perceived that the management could invest to further improve overall firm performance, hence 35.71% of the respondents indicated they could improve in the field of Information Technology, 32.14% indicated that they could improve in the Human Resource component of management, 14.29% in their Finance and Administration component of management, and 17.86% in their Projects (Technical) management component.

Table 7 shows the respondents description of the shifts in the operating environment of the Civil Engineering Construction Industry in Kenya.

Table 7: Description of Shifts in the Civil Engineering Industry

Nature of Shifts In The Civil Engineering Industry	Frequency	Percentage (%)
Very Turbulent	4	14.29%
Fairly Turbulent	16	57.14%
Turbulent	8	28.57%
Not Turbulent	0	-
Total	28	100%

Source: Response Data

Firms that engaged in some degree of effective monitoring, measurement and reporting of their performance against selected stakeholder indicators and targets were 60.71%; and those that did not were 39.29%. Reasons cited for non engagement in these activities varied from a firm's perceived lack of capacity to carry out the same, to their lack of appreciation of the relevance of such activities to their overall performance in the long term. Periodic evaluation of general industry performance was carried out by 78.57% of the respondents; while the remaining 21.43% did not evaluate general industry performance. Of those who responded positively, 4.55% evaluated general industry performance quarterly, 27.26% did so semi-annually, 54.55% did so annually, and the remaining 13.64% carried out this

continuous evaluation and the related activities as required by individual projects being undertaken at any given time.

As far as market share (in terms of percentage) was concerned, 46.43% of respondents did not give an indication of their perceived market share citing reasons of confidentiality; another 21.43% indicated that their perceived market share was about thirty per cent; 17.86% indicated that their perceived market share was about five per cent; 7.14% gave their perceived market share as being ten per cent; 3.57% gave their perceived market share as being twenty per cent; and a final 3.57% indicated that their perceived market share was seven and a half per cent.

Table 8 shows the respondents perception of Client Satisfaction with their performance.

Table: 8 Level of Client Satisfaction with Firm's Project Delivery Capacity

Level of Client Satisfaction with Firm's Project Delivery Capacity	Frequency	Percentage %
Very Good	15	53.75%
Good	12	42.86%
Average	1	3.57%
Total	28	100%

Source: Response Data

Annual turnover in the last five years was given as being between KShs. 16 Million and KShs. 30 Million by 7.14% of the respondents; 21.43% categorised their annual turn over in the last five years as being between KShs. 31 Million and KShs. 45 Million; 46.43% categorise their annual turnover in the last five years as being over KShs. 46 Million; 25% of the respondents contacted did not give a response to this question, citing reasons of confidentiality.

Table 9 shows the respondents rating of several key success factors in monitoring and evaluating their performance, rated on a scale of 1 - 4, where 1 represented “not important” and 4 represented “very important” perception.

Table 9: Key Success Factors

Key Success Factors	Mean Score	Standard Deviation
Personnel Competence / Efficiency	6.75	6.24
Plant and Machinery	6.50	8.74
Market Share	6.75	2.99
Financial Soundness	6.00	6.32
Industrial Safety	5.75	5.31
Capacity Utilisation	6.00	5.35

N = 28

Source: Response Data

Market Share and Personnel Competence / Efficiency rank highest, followed by Financial Soundness (Capital), and Capacity Utilisation. These crucial key success factors also provide a gauge against which an individual firm's responsiveness to bids submitted is measured.

CHAPTER FIVE

CONCLUSION

5.1 Summary, Discussions and Conclusions

The study focused on Strategic Planning and Performance of Civil Engineering Construction firms based in Nairobi. The study had two objectives, - namely to determine the Strategic Planning Practice adopted by Civil Engineering Construction firms, and to determine whether the Strategic Planning Practice of Civil Engineering Construction Firms is related to the performance of such firms. To provide this information, forty two companies listed as operating in Nairobi were contacted to participate in the study. Twenty eight of these responded positively.

Various aspects of strategic planning and performance were investigated. These included vision and mission and the related statements, priorities in objective setting and goal attainment, planning and planning procedures, environmental scanning including industry shifts, competitor analysis and stakeholder indicators and targets, perceived industry trends and individual firm performance in line with such trends, individual firm perception of their market share in terms of

percentage, as well as a rating on pertinent strategic planning practices and key success factors. A summary of the findings are highlighted.

Company vision and mission is no longer just an abstract phenomenon to a majority of firms. This study showed that majority of the respondents had a written down vision statement, and a vision statement that was discernible. The only drawback was that these were not made explicit, and so there was a marked lack of ownership, and understanding of the vision and mission amongst lower cadres of staff. Over more than half of the respondents confirmed that their vision and mission statements had been in existence for more than five years.

The results of this study gave a clear indication that top management played a key role in formulation of strategic plans and being directly involved in the process. The positive change in public sector procurement procedures in the last five years had also positively impacted the industry. As more funding had been accessed for this sector from multi national donors, there was a general rejuvenation of the industry and the firms studied indicated that even their strategic goals had changed within the same period to embrace these changes.

There was a distinct variation in the strategic objectives noted in this study depending upon the scope of operations on geographical basis. Thus, those respondents who operated at national level emphasised

strategic objectives that were geared towards maintaining profitability through cost effective control and appropriate technical application in executing works, and building a sound financial base in order to be in a position to compete with the regional and international firms. Firms already operating at the regional level had strategic objectives that were focused on offering high standard construction service within budget and on time, whilst adhering to set specifications and standards set by the relevant contracting authorities. The firms that were international had strategic objectives focusing on maintaining quality service delivery and increasing their market share.

Of the respondent firms, competitive advantage was perceived as hinging on being multi-disciplined, having a lower cost structure and good local knowledge of the industry. These respondents focused on the public sector segment of the market, which is by far the largest in the country. Method statements were deemed necessary to mitigate and control elements of risk, by giving adequate background information, and thorough procedures for task implementation, by a majority of the respondents.

The analysis of performance indicators not only enables managers to determine the actions that can be translated into fruitful gains in the short term, but also acts as a means of improving performance,

identifying a firm's strengths and weaknesses, and to help in the overall learning process of the construction industry (Alarcón et al, 2001).

The SWOT analysis was specifically used as an environmental analysis tool by only one third of those who indicated that they were engaged in environmental scanning for purposes of enhanced performance. Sources of information included stakeholder meetings and interactive forums such as project site meetings, national and international construction conferences, and related stakeholder publications to which these firms subscribed.

Market Share and Personnel Competence or Efficiency appear crucial to the success of this industry. The key driver of public sector construction market is donor funding through international agencies to the tune of billions of shillings in local currency. As a result of this, firms that had established themselves as reliable and quality providers of construction service tended to maintain their market share. Competent personnel maximised Return on Time (ROT) through enhanced productivity and efficiency, thereby ensuring reasonable adherence to set project time lines i.e. timely completion of contracted works, ultimately leading to an improved reputation for the firm.

In Kenya, the Civil Engineering Construction industry is highly fragmented. Competition is broadly based on technical capabilities,

cost, and financial resources. Whereas the lower end of the market (small projects) is over crowded, there is less competition in the bigger size projects because of financial constraints which creates barriers to entry. In spite of foregoing, and as far as the first objective is concerned, this study noted that vision formation and mission statement origination is a strategic planning practice that has been embraced by over half of the firms studied. This is a clear indication that the top management appreciates the import of clearly defined vision statements and mission statements. The one drawback that was noted was that, the intent of these vision statements and mission statements are not made explicit, and there was no trickle down effect, of knowledge of the same to lower cadres of employees. They remain to a large extent a preserve of the top management.

Although top management was directly involved in the formulation of overall strategic plans for their firms, the devolution of such plans into measurable and achievable goals, and objective setting indicated that there was a downward trickle of authority to incorporate input from section heads and departmental heads. Options of strategic objectives centred on maintenance of profitability through effective cost control, offering high standard construction service within stipulated budget and on time, and adopting best industry practices in a bid to stay competitive, relevant, and continuously increase market share. Most construction firms displayed a well diversified and balanced mix of

construction services, alongside their core areas of expertise, as evidenced by the majority of the firms who had their services focused on several interrelated sets of construction practices.

As far as the second objective of this study is concerned, the researcher noted that firms that invested in preparation of work plans, method statements and environmental scanning had a definite competitive edge over those that ignored all or some of the above factors. This was found to be in line with what Ansoff and MacDonnell (1990) contributed to the subject of planning and its outcomes in general, that a firm's approach towards planning fell in two categories; those that had unplanned opportunistic approach to doing business, and others with a systematic planned approach.

This study noted that the respondents' who took time to prepare method statements, had higher successful project completion rate and lower project termination rates, if at all. Most of projects terminated for the planners arose mainly as a result of the clients' default in payment of certificates of work done over prolonged periods. The respondents who did not take time to prepare method statements recorded a lower successful project completion rate. For this category again, over a third of contracts undertaken had been terminated, owing mostly to delays within the programme of works, and technicalities concerned with project site administration. This was a direct indication that the degree

of planning incorporated into the related process of construction service delivery was directly related to the overall performance of the firm.

Although the importance of Information Technology was appreciated, it was clear that this opportunity had neither been fully exploited, nor wholly adopted as an integral management component to improve firm performance, and therefore its overall impact, vis-à-vis firm performance in general, was low. Within the construction industry, assessments of technology, and innovations has always been largely dependent on MOR&PW's specifications depending upon the nature of project, such as the adoption of the "Super Pave Design" in road construction. The overall observation was that if firms failed to plan any phase of a program, it was likely to forego planning altogether, whereas if it did plan a phase, it was likely to plan all phases (Ansoff & MacDonnell, 1990) with positive outcomes.

Strategic modes of thinking and exploration of available planning alternatives gives rise to best practice and benchmarking for entire industries. This in turn leads to enhanced performance through adoption of the best strategy for sustainable competitive advantage. Strategic planning within the civil engineering construction industry therefore, requires professional management of performance processes that impact projects, in order for positive outcomes to be registered.

5.2 Limitations of the Study

Due to time and financial constraints, only construction firms registered and operating in Nairobi were contacted. The MOR&PW list from which the listing was obtained was deficient, in that a good number of contractors registered as operating at certain addresses were no longer available at the addresses given in the listing. Some respondents also took too long with questionnaires resulting in several repeat visits to collect the same and access the data from them.

Respondent attitude to some sections of the questionnaire bordered on suspicion. A section of this study required respondents to state their perception of their annual expenditure on operations within the last five years, and what they considered market share to be in terms of percentage, and what they considered to be a reasonable range within which their annual turnover was. This was met with resistance and suspicion. The respondents were unwilling to respond to that part of the questionnaire that dealt with expenditure, market share, and annual turnover citing reasons of confidentiality. Respondents were adamant that they did not want this information to get into the public domain in spite of written assurance from both the researcher and the university.

5.3 Suggestions for Further Research

There is need for additional studies to be undertaken on aspects of strategic planning and performance of firms within the Civil Engineering Construction industry as a whole in Kenya. This study focused only on the firms that were registered in Nairobi. There is need for further research, on a national basis, in order to validate the findings of this study.

This study was cross sectional. The data used was sourced from top management of the respondent firms within a given time frame. Strategy and strategic planning co-opt changes within the constantly evolving environment, and are bound to change over time depending on impact of this turbulence. Performance indicators that give credence to a firm's positioning within the industry may also be subject to change over time depending on the project sub - sector for which works are being contracted, the magnitude of the works, the nature of procurement through joint ventures, alliances or even sub-contracting.

5.4 Implications for Policy And Practice

The provision of basic, quality infrastructure is a preserve of government. Owing to the stability and dependability of demand for this

service, government procurement and payment procedures should be further streamlined. This would enable cash flows for such projects to be disbursed with minimal delays. Such delays jeopardise the gains that have been made by industry players, at the expense of the national economy. Streamlining of the contract procurement process increases transparency and stakeholders' increased accountability for quality of service delivered.

At firm level, the practice of planning and coherent communication of aspects such as vision and mission statements, across the board would not only ease internalisation, of the same amongst employees but would also help to gain their commitment and ownership to both. Visions and missions need to be operationalised, in order to ensure their continuity, even with change of guard at top level management. This way the management can therefore be assured of their employees support when changes in the firms operating environment necessitate changes in strategic plans and modes of operation to maintain competitive advantage. Broad based leadership or flat organisation structure is central to the demystification of the vision and mission statements, and the provision of direction and support in implementing improvement initiatives.

Excessively high capital requirements for firms in the construction industry, translates into lack of capacity to handle larger projects,

whose capital requirements are enormous, for the national firms. This then tends to create two scenarios which are, first, a tendency to increase risks in order to be awarded a project, or second, creation of an imbalance in the market, as local firms face stiff competition from regional or international firms with relatively cheaper access to funding.

Players in the industry ought to adopt measures that lead to proper capacity utilisation, as this assists not only in keeping production costs low, but also keeping tender prices competitive. Firms need to develop a track record of delivering on their strategic objectives, in order to amass goodwill from their clients and support from their employees. Planning and effective planning initiatives enhance process improvement, and waste reduction (in terms of time, man hours on project, efficiency of direct labour). Performance indicators are useful for internal, continuous improvement of the productivity of the firms, and some of them give rise to industry benchmarks, thereby enabling firms to identify performance gaps and opportunities, in a constantly evolving environment. Guided by market intelligence, firms need to monitor the external environment, analyse and understand the competition.

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APPENDICES

APPENDIX 1: LETTER OF INTRODUCTION

Judith A Yamo
School of Business Studies
University of Nairobi
P. O. Box 30197
Nairobi

12th June, 2006

Dear Respondent,

RE: COLLECTION OF SURVEY DATA

I am a postgraduate student at the University of Nairobi. In fulfilment of the requirements of Master of Business Administration (MBA) Course, I am undertaking a management research analysis of the Strategic Planning and Performance of the Civil Engineering Construction firms based in Nairobi.

I kindly request your assistance in completing the attached questionnaire. Kindly respond to all the questions as best you can. I would like to assure you that any comments made to the undersigned, will be treated in confidence and will be used entirely for academic purposes. A copy of the final report may be availed to you upon request.

I thank you in advance for your co-operation.

Yours faithfully,

Judith YAMO
MBA Student - UoN

Cc: Dr. Martin Ogutu - Senior Lecturer / Supervisor

APPENDIX 2 : QUESTIONNAIRE

A STUDY OF STRATEGIC PLANNING AND PERFORMANCE OF CIVIL ENGINEERING

CONSTRUCTION FIRMS IN NAIROBI

Questionnaire No.....

<u>No.</u>	<u>Question</u>	<u>Response</u>
General Information		
1	What is the name of your Company?
2	When was the Construction Company founded?
3	How long has it been in operation? Circle as appropriate.	1. 1 - 5 years 2. 9 - 10 years 3. 11 - 15 years 4. 16 - 20 years 5. 20 + years
4	What are the origins of this Company?	a. Foreign Owned b. Local (Private) c. Regional d. Local (International Affiliation)
5	Which of the following geographical areas does your Company cover?	a. National b. Regional c. International d. Other (Specify)
6	What is the position of the Respondent?

7	What is your main area of focus?	a. Paved Roads & Construction b. Resealing & Recarpeting c. Gravelling d. Labour Based Maintenance e. Routine Maintenance f. Bridge Construction and Drainage Structures g. Specialist Works e.g. Piling, Rock Drilling. Other (Specify).....
8	Are you aware of any opportunities for your organisation to expand in your focus areas?	1. Yes 2. No
9	Categorise your annual expenditure on operations in the last 5 years.	1. Less than KShs 5 Million 2. Between KShs 6 Million and KShs 10 Million 3. Between KShs 11 Million and KShs 15 Million 4. More than KShs. 15 Million
10	How many employees does your Company have?	1. <50 2. > 50 < 100 3. > 100 < 150 4. >150 < 200 5. > 200
11	Please indicate the number of employees in the following functions in your Company.	Projects (technical) staff a. 5 - 10 b. 11-15 c. 16 - 20

(Continued next p

d. More than 20

Finance & Administration

a. 5 - 10

b. 11-15

c. 16 - 20

d. More than 20.

2 IT

a. 5 - 10

b. 11-15

c. 16 - 20

d. More than 20.

3 Human Resources

a. 5 - 10

b. 11-15

c. 16 - 20

d. More than 20

4 Others (Specify).

.....

.....

12 What criteria does your
Company use to appoint
key personnel?

1. Work Experience

2. Performance Track Record

3. Other (specify)

13	Please indicate number of projects fully implemented by your Company in the last five years? Circle as appropriate.	1. 1 - 5 2. 6 - 10 3. 11 - 15 4. 16 - 20
14	Please indicate number of projects currently being implemented by your Company. Circle as appropriate.	a. 1 - 3 b. 4 - 7 c. More than 7
15(a)	Do you always prepare a Method Statement or contractual work being tendered for?	1. Yes. 2. No.
15(b)	If No. Why not?
16(a)	Have you ever been terminated from performing a contract?	1. Yes. 2. No.
16(b)	Out of all the contracts you have undertaken, how many have you	1. Successfully completed 2. Been terminated 3. Been abandoned

17(a)	Does your Company subscribe to any models of excellence or frameworks for quality standards, bench-marking tools, self assessment programmes, performance improvement initiatives.	<p>1. Yes.</p> <p>2. No.</p>
17(b)	If Yes, which ones (Please list at least 2)	<p>1.</p> <p>2.</p>
17(c)	If "No", why not?	<p>.....</p> <p>.....</p>

Strategic Planning

1.	What is your company's vision?	<p>.....</p> <p>.....</p>
2	What is your Company's mission statement?	<p>.....</p> <p>.....</p>
3	Does your Company have specific strategic goals?	<p>1. Yes.</p> <p>2. No.</p>
4	If yes, have these strategic goals changed in the last 5 years?	<p>1. Yes.</p> <p>2. No.</p>
5(a)	Does your company have a strategic plan?	<p>1. Yes.</p> <p>2. No.</p>
(b)	If yes, indicate the period covered by the current strategic plan?	<p>.....</p> <p>.....</p>
6	What is the nature of your Company's strategic planning process?	<p>1. Documented</p> <p>2. Not Documented</p>

11	How are your work plans formulated?	<ol style="list-style-type: none"> 1. By Top Management Only 2. Collectively across the Board
12	How often do you take time out to draw up your work plans?	<ol style="list-style-type: none"> 1. quarterly 2. semi-annually 3. annually 4. Other (Specify).....
13	How do you confirm that the interests of stakeholders are being met?	<ol style="list-style-type: none"> 1. Stakeholder Meetings & Interactive Forums 2. Subscribe to Stakeholder Publications Other (Specify)
14(a)	Is this information integrated in your work plans?	<ol style="list-style-type: none"> 1. Yes 2. No
14(b)	If yes, how? If no, why not?	<p>.....</p> <p>.....</p>
15(a)	Is your Company willing to work with other stakeholders in formulation of an all inclusive strategic plans?	<ol style="list-style-type: none"> 1. Yes. 2. No.

5(b)	If "No", why not?	<p>.....</p> <p>.....</p>
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16. How important are the following factors in making your strategic plans effective.	Very Important (4)	Important (3)	Fairly Important (2)	Not Important (1)
Company Vision				
Company Mission				
Objective of Company				
Company Reputation				
CEO				
Nature of Competition				
Others (specify)				

Performance Indicators		
1(a)	Does your Company engage in any environmental scanning for purposes of enhanced performance?	1. Yes 2. No
1(b)	If No, why not?
1(c)	If yes, how?
2(a)	Do you collect information about your competitors?	1. Yes 2. No.
2(b)	If yes, how? Explain.
3	Can the current industry structure be used as a reliable guide to the nature of competition and industry performance in the future?	1. Yes 2. No

<p>In what areas does the management feel your Company can improve?</p>	<ol style="list-style-type: none"> 1. Finance and Administration 2. Human Resources 3. Information Technology 4. Projects (Technical) <p>Other (specify).....</p>
<p>5 How can you describe the shifts in the Civil Engineering Construction Industry in Kenya over the last five years? Circle as appropriate.</p>	<ol style="list-style-type: none"> 1. Very Turbulent 2. Fairly Turbulent 3. Turbulent 4. Not Turbulent
<p>6(a) Is your Company engaged in any effective monitoring, measurement and reporting of its performance against selected stakeholder indicators and targets?</p>	<ol style="list-style-type: none"> 1. Yes 2. No.
<p>6 (b) If "No", why not?</p>	<p>.....</p> <p>.....</p>
<p>7(a) Do you evaluate general industry performance periodically?</p>	<ol style="list-style-type: none"> 1. Yes 2. No.

7(b)	If yes, how often?	1. quarterly 2. semi-annually 3. annually Other (Specify)		
8	What does your Company consider its market share to be in terms of percentage?%		
9	What is the level of Client satisfaction with your performance?	Very Good	Good	Average
10	Categorise your annual turnover in the last 5 years.	1. Less than KShs 15 Million 2. Between KShs 16 Million and KShs 30 Million 3. Between KShs 31 Million and KShs 45 Million 5. More than KShs. 46 Million		

Key Success Factors

11. In monitoring and evaluating performance, how does your company rate the following :	Very Important (4)	Important (3)	Fairly Important (2)	Not Important (1)
Personnel Competence / Efficiency				
Plant and machinery				
Market Share				
Financial Soundness				
Industrial Safety				
Capacity Utilisation				
Others (Specify)				

Thank you for your time.

**APPENDIX 3 : EXTRACT FROM MOR&PW MUSTER ROLL
LIST OF REGISTERED CONTRACTORS OPERATING IN NAIROBI, AS AT APRIL 2005**

Ref. No.	Name of Firm	Box No.	Tel. No.	Physical Location
1	Access Construction Company Ltd	60137, Nairobi	572 085 / 8	Ngong Road Nairobi
2	Allan Bauhmann Contractors	1074 - 00200 Nairobi	228 318 / 217 903	Corner House 7th Floor
3	Alro Construction	158 - 00100 Nairobi	828 782	Vision Plaza 2nd Floor
4	Amor Construction & Agency Services Ltd	30926 - 00100 Nairobi	212 709 / 21368	Cannon House
5	Angelo General Traders	73006, Nairobi	214 141	Gill House 3rd Floor
6	Anthill Construction Company	4271 Nairobi	373 511	Assurance Plaza 4th Floor
7	Arab Contractors (K) Limited	967 - 00606 Nairobi	445 2138	Westlands
8	Associated Construction Company Limited	31114 Nairobi	2715526 / 716512	Elgon Road, Upper Hill
9	Asteriks Engineering Limited	31732 - 00600 Nairobi	602 616	Hurlingham Plaza
10	Aswa Developers & Contractors Limited	43281 - 00100 Nairobi	0 722207708	Gitanga Road
11	Avlak Contractors Limited		32199	559948 Pate Road Industrial Area
12	Azicon Kenya Limited	75740 - 00200		607825 Langata Road Nairobi
13	Bekemwa Investment Limited	15422 00100		Agriculture House
14	Bende Contractors Company Limited	1336 00618	312 677	Off thika Road Nairobi
15	Benkal Enterprises		67947 0722 691 38	Banda Street Nairobi
16	Billdock Enterprises & Construction Co. Ltd.	12713 00400	0 722 851 632	Ribeiro House Nairobi
17	Bitumen Equipment Spares & Services		28622	Langata Road Nairobi
18	Bullsons Agencies Limited		59330 0 722 519 045 / 764 392	Juja Road Nairobi
19	Butex Enterprises		69003	535942 Nacico plaza
20	Cabro Works (EA) Limited		46247 823021 / 823219	Embakasi Nairobi
21	Capital Construction Company Limited	30607 00100	820140 0721 940 427	Mombasa Road
22	Capital Technical Services Limited		11809	240231 Agip House 2nd Floor
23	Careful Construction Co Limited		6508 054 22273	Kiambu Road
24	Cargill Enterprises Limited	2753 - 00200		823732 Old Airport Road Nairobi
25	Caebud Engineering Services Limited	2751-00500		3746441 Muranga Road Nairobi
26	Charmline Construction Limited		33089	4749407 Ngara Emawa House Nairobi
27	Chart Engineering Enterprises Limited	35017 - 00200	318446 / 0722 615 755	Rattansi House 2nd Floor Nairobi
28	China Road & Bridge (K) Limited		39037	570331 Hatheru Road Nairobi
29	China Wu Yi Company Limited	49282 00100		2735091 Hurlingham
30	Chogi's Garage Limited		72146 0 722516744 / 568384	Ngong Road Nairobi
31	Chumatech Company		51013 534970 / 554075	
32	Coastal (K) Enterprises Limited		46925 55849 / 559816	Lunga Lunga Road Industrial Area
33	Come - Cons Africa Limited	18429 - 00500	556038 / 653257	Rangwe Road Nairobi
34	Completion Sure Limited		21742	43156 Tabere Crescent Nairobi
35	Comroad Construction & Equipment Limited		70066	605338 Kenelek House
36	Cowford General Contractors Limited	10572 - 00100	241 250	Mercantile House Nairobi
37	Constech Engineering Enterprises Limited	52159 00200	650964 / 0 722 935 665	Kimathi Street Nairobi
38	Cresent Construction Company Limited		49094 533819 / 20	Lunga Lunga Road Industrial Area

EXTRACT FROM MOR&PW MUSTER ROLL - LIST OF REGISTERED CONTRACTORS OPERATING IN NAIROBI, AS AT APRIL 2005

Ref. No.	Name of Firm	Box No.	Tel. No.	Physical Location
39	Damcive Company Limited	3404 - 00200	0 734 539 852	Cianda House Nairobi
40	Deche Construction Company Limited	46753 - 00100	0 722 301 917	Maragua Road Nairobi
41	Dekings Traders Limited		67156	720750 Kenya House Nairobi
42	Dimken (K) Limited	12473 - 00400	341 926 / 072 711712	KPCU Nairobi
43	Direct Auto Parts & Services Limited		13372	Langata Raod Nairobi
44	Dolphin Construction	7905 - 00200	227 891	Caxton House - Std, Street
45	Donwills General Contractors Limited	13310 - 00100	575 986	AIA House Kaputei House Nairobi
46	Drewline Limited		20984	607075 Kogo Plaza Nairobi
47	Eastern General Mechantile		38782	250320 Outer Ring Road
48	Ekalakala Construction Co. Ltd & Gen Contr		34158 788579/0722 512 812	Mvuma Nyuki Road Nairobi
49	Elieva General Construction		60324	
50	Elipol Limited		10415	Langata Nairobi
51	Elite Earth movers Limited	1328 00606		788499 Komarock Road Nairobi
52	Emisons Limited	10082 - 00100	0 722 424 495 / 330 622	Hotel County 4th Floor
53	Epcobuilders Limited	55628 - 00200		558796 Falcon Road Nairobi
54	Epitome Construction Limited	11542 - 00100		2737062 Upper Hill Nairobi
55	Epsilon C Engineering Contractors Limited		76176	789520 Donholm House Outer Ring Road
56	Eriden Gen Construction & Renovations	23005 - 00204	0 722 513 657	Mombasa Road South B Nairobi
57	Exact Construction Engineers Limited	8407 - 00100		2713304 Rose Avenue Flats Hurlingham 3rd Floor
58	F. M. Construction		72855	820549 Kamami House Thika
59	Firoze Construction Limited	46048 - 00100	272 0412 / 417 / 420 / 29	Upper Hill Nairobi
60	Foundation Engineering Limited	48525 - 00500		723901 Bishop's Road Fort Granite House Flats
61	Francel Enterprises Limited		1620	34097 Luthuli Avenue Nairobi
62	Frankim Construction Limited		11366	630463 Waiyaki Way Nairobi
63	Funan Construction Company Limited	55252 - 00200		229853 Halie Selassie Avenue
64	G. Issaias & Company Limited		43500	2718717 Kiambere Road Nairobi
65	Gamusi Engineering	13366-00100		564681 Popman House Nairobi
66	Gasjo Construction Company Limited		73523 2717060 / 74419	Erand Institute Nairobi
67	Gathanji Wells Agencies		12521	860876 Thika Road Garden Estate Nairobi
68	Gathekia Technical Services Limited	2242 00200	0 721 846012	Fifty Investment House 5th Floor
69	Gathinga Contractors Limited		59782	
70	Geoparty Builders & General Merchants		77990	Kimathi House Nairobi
71	Gesa Building & Civil Engineering Limited		57550	330460 Bima House Nairobi
72	Gichocho Building Contractors		39474	861833 Thika Road CK Villa Nairobi
73	Global Ride Kenya Limited		20188 205 244	Loita House 8th Floor
74	Gracan Limited		62680 883 726 / 7 / 0721 368 230	Golden Gate Drive
75	H. Young & Company Limited		30118 530 145 / 530151	Funzi Road Nairobi
76	Impact Auto & Hardware Limited		68414 763 751	Eastleigh Nairobi

EXTRACT FROM MOR&PW MUSTER ROLL – LIST OF REGISTERED CONTRACTORS OPERATING IN NAIROBI, AS AT APRIL 2005

Ref. No.	Name of Firm	Box No.	Tel. No.	Physical Location
77	Interlect General Contractors Limited	43971 00100	0 734 832 292 / 341 467	Elimu Sacco House 2nd Floor Nairobi
78	Intex Construction Limited	60293 00200	0 722 206161 / 251005	Anniversary Towers 21st Floor Nairobi
79	Jabenga Construction			311054 Mlonlongo Nairobi
80	Javaland Contractors Limited	59468 - 00200	312 931	Standard Building 7th Floor Nairobi
81	Jeda Construction	8857 - 00200	273 8151	Nyaku House Nairobi
82	Jengika Limited	2664 - 00200	0 722 865 763	Gemuwa House Nairobi
83	Jipsy Civil & Building Contractors		58824	Galexon House, Nairobi
84	Johli Works (K) Limited	9045 - 00100		2737763 Pan African Arcade Nairobi
85	Jomashe General Contractors Limited	621 00517		571845 Ngong Road Nairobi
86	Jombekas Construction Company Limited		58441	Suite 36 Longonot Place Apartments
87	Kabuito Contractors Limited	14054 - 00800	241 830	861002 Off thika Road Nairobi
88	Kalolowang Engineering Services		63485	552651 Kirinyaga Road Nairobi
89	Kalz mann & Company	14169 - 00800		
90	Kamjim Contractors & Supplies Limited	8344 00100	331863 / 4	247313 Kirinyaga Road Nairobi
91	Kamp General Engineering Company		41912	Donholm
92	Kange Construction Company Limited	6797 00200	0 733 741 612	Nyambene House
93	Kangundo Builders Limited	7087 00100	0721 725 272 / 312 622	240013 KICC Ground Floor
94	Kariuki Construction Company	70226 - 00400		Baricho Road Nairobi
95	Karuri Civil Engineering (K) Limited		32126 536210 / 11	Mombasa Road Nairobi
96	Kay Construction Company Limited		43114 824 903 / 5 / 6	Moi Avenue Nairobi
97	Keiden Construction Company	46710 00100	213 516	214437 Jainsala Road Nairobi
98	Ken - Rosh Limited	11638 00400		789924 Outer Ring Road
99	Kentan Services Limited		11290	4343945 Westlands
100	Kenworks Limited		825	315116 Cargen House 3rd Floor
101	Kenya Aberdare Engineering Limited	79061 00400		218183 Kijabe Street Nairobi
102	Kenya Koch Light Industries Limited		39582	Gill House 3rd Floor
103	Kibet General Construction Limited	73006 - 00200	214141 / 223573	551843 Vinodeep Towers Baricho Road Nairobi
104	Kibinico Enterprises Limited	463 00100		242676 Bunyala Road Nairobi
105	Kidijo Enterprises	6780 00200		Outer Ring Road
106	Kinacon Engineering & Construction		33902	229921 Corner House
107	Kingsway Business Systems Ltd		79048	2713222 Ngong Road Nairobi
108	Kirinyaga Construction Ltd	48632 00100		Agip House
109	Kiu Construction Company Ltd	10564 00100	0 722 538 845 / 342 633	43343 Kenda House Nairobi
110	Kiuu Suppliers & General Construction Ltd		50439	Off Outer Ring Road Nairobi
111	Krishan Behal & Sons	16227 - 00610	352 022	712464 Hurlingham
112	Kualam Limited		12545	Banda Street Nairobi
113	Latis Construction Company Limited	10157 - 00100	0721 495263	210768 Mwalimu Co-op House Nairobi
114	Latrade Supplies Company Limited	9459 00300		531583
115	Lee Construction Limited		28969	

EXTRACT FROM MOR&PW MUSTER ROLL - LIST OF REGISTERED CONTRACTORS OPERATING IN NAIROBI, AS AT APRIL 2005

Ref. No.	Name of Firm	Box No.	Tel. No.	Physical Location
116	Legend Construction Limited		4500	808193 Maadi House Nairobi
117	Lentine General Contractors (K) Ltd	7092 00300	0 722 743 060 340356	Seven Stars Complex Nairobi
118	Les Amis Ltd	1008 00100		553082 Peat Marwick House
119	Les Axes Construction Company Ltd	51364 - 00200	223 481 / 0724 860 983	Arcade House Nairobi
120	Loadline Enterprises Ltd		52440 242668 / 333149	Ufanisi House Nairobi
121	Maa Resources Company Limited	8521 00100		Kazi Plaza Nairobi
122	Machiri Limited		68075 560063 / 784804 / 784 726	Kilimani Wood Avenue Nairobi
123	Macroline Ltd		60529 0 722 310037 / 377068 / 227374	Cargen House Nairobi
124	Marena Limited	1531 00100		248609 Crescent House Nairobi
125	Mark-well services Limited	7109 00100	313020 / 0 722 729 710	Anniversary Towers Nairobi
126	Masosa Construction Limited		34415 650 747	Bi Mech Tech Building Nairobi
127	Mondola M. Ltd		39462	860599 Mountain View Nairobi
128	More House Limited	6330 00200	273 0808	Upper Hill Nairobi
129	Mos Management Services Ltd	57217 00200		573099 Arrow House Nairobi
130	Motto Construction Engineering Ltd		608120	608120 Langata Road Nairobi
131	Mukafar Enterprises Limited		47457	813807 Ngetha House
132	Mwanzo Building Mart Co. Eng.		44994	
133	Naaro Builders		7399	216505 Tom Mboya Street
134	Ndocha Enterprises Limited		61728 781150 / 0722 715 186	Off Kamunde Road
135	Ndogoro General Contractors		18606	533293 Off Nanyuki Road
136	Ndumberi General Merchants Limited		39474 861822 / 1	C K Villa Thika Road
137	Ninon Engineering Works Ltd		18857	244750 Mombasa Road Nairobi
138	Northline Limited		50690	252998 20th century Plaza 3rd Floor Nairobi
139	Nyoro Construction Company Limited		74416 331383 / 9	Coffee Plaza Nairobi
140	Ogot Mos Company Limited	79412 00200	786 558	Outer Ring Road
141	Ongata Works Limited		58160 227751 / 210608	University Way Nairobi
142	Orbit Enterprises Limited	49604 00100	374 6290 / 97	Chiromo Lane Nairobi
143	Pacific Timber & General	44177 - 00100		56110 Moi Avenue Nairobi
144	Parbat Siyani Construction Limited	10748 00100	554706 / 554794	Kitui Roac Nairobi
145	Penelly Construction & Engineering Limited	25939 0054		217785 Monrovia / koinange Street
146	Penkal Construction Company Limited	6753 00200		571672 Komarock Road Nairobi
147	Perejap Motor & Electrical Spares		16225	605338 Wilson Airport Nairobi
148	Polical International Limited	11987 00400	631 241	Halie Selassie Avenue
149	Powen General Construction Limited	8630 00300		780031 River Road Nairobi
150	Propak Trading Company Limited		44177 0722 271 700	Opp Jamhuri
151	Pumpken Enterprises Company		58835	229593
152	Put Sarajevo General Engineering Co. Ltd	48331 00100	271 8571	Lenana Road Nairobi
153	Ramgin Construction Limited		33315	763567 Mwanzo House Nairobi
154	Rigithu Enterprises Limited	830 00502	0722 843 074	Sadi Road Nairobi

EXTRACT FROM MOR&PW MUSTER ROLL - LIST OF REGISTERED CONTRACTORS OPERATING IN NAIROBI, AS AT APRIL 2005

Ref. No.	Name of Firm	Box No.	Tel. No.	Physical Location
155	Rontech Technical Services	6168 00100	0721 584 137	Sadi Road Nairobi
154	Rlglithu Enterprises Limited	830 00502	0722 843 074	
155	Rontech Technical Services	6168 00100	0721 584 137	Mombasa Road Nairobi
156	S. S. Mehta & Sons	41853 00100	553498 555306	Outer Ring Road
157	Safari Engineers Limited		77274 794 595	Dakar Road
158	Salama Construction Company Ltd		18846 545711 / 558012	723511 Jabavu Close
159	Sanaic Building Civil Amp		2543	Old Mutual Building 3rd Floor
160	Silverbase Enterprises	6124 00300	243301 / 0733 803 794	Halie Selassie Avenue
161	Silvol Enterprises Limited		27670 0733 660729	Nyambene House
162	Sivad Construction Limited		150226 0722 315 376 / 247 420	Off Thika Road Nairobi
163	Smom Contractors Company Limited		33807 810347 / 0721 294 033	520330 Tetu Court Nairobi
164	Sobetra Kenya Limited		58275	Usalama House Nairobi
165	Spazol Agency		12713 0722 472 972 / 3110323 / 35527	2736319
166	Specialised Equipment & Eng. Contrat. Limited	55553 00200		General Mathenge Road
167	Spencion Kenya Limited		14294	343853 Nature Plaza Nairobi
168	Star General Contractors (EA) Ltd	54430 00200		
169	Stirling Civil Engineering Limited		7109	Shakandrass House Nairobi
170	Super Combination Agencies		7807 0722 808 830	559088 Enterprise Road Industrial Area
171	Swift Builders & Civil Eng. Limited			4347051 Githunguri Road Nairobi
172	TM AM Construction Group Limited		39487	Spine Road Nairobi
173	Tartex Contractors limited	7339 00200	0722 636052	250980 Halie Selassie Avenue
174	Techmaster General Services	8641 00200		Argwing Kodhek Road
175	Timax Building & General Contractors		67001 0722 962 938	253024 Wabera Street Nairobi
176	Triple I & K Company Limited		4478	Lunga Lunga Road Industrial Area
177	True North Construction Limited		555 292 / 554 248	Airport N. Road Embakasi
178	Tum-O-Metal Engineering Limited	74074 - 00200	45695 823501 / 823 084	Uchumi House Nairobi
179	Universal F & B Contractors Limited		60735	Baba Dogo Road Ruaraka
180	Veteran General Contractors		45329 862 720 / 862 705	Mpaka Road Westlands
181	Victory Construction Company Limited		445198 / 4451956	607075 Mai mahiu Road
182	Virgin Ways (A) Limited	457 - 00618		Pangani Nairobi
183	Walkalb Limited		209984	Outer Ring Road
184	Wamoya Construction Company Limited	47433 - 00100	676 4630	550827 Landhies Road Nairobi
185	Waybridge Construction Company Limited		58121 0 151 22305	Cargen House
186	Westbuild General Contractors Limited	54071 00200		
187	Wilke International Limited	9679 00300	251 257	
188	Windsorview		55106 602521 / 602750 / 0 722 980098	
189	Woodly Merchants	9357 00300 Nairobi	0 722 254 565	Caxton House - Std. Street
190	Xophers J & Building Contractors Limited	69893 Nairobi	0 722 793 422 / 724262	Langata Raod Nairobi
191	Yosi Contractors Limited	2009 Nairobi	272 8245	Ralph Bunche Road Nairobi



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