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DECLARATION

Student Declaration – I, Petros Isaac Kanjera, do hereby declare that this dissertation is the result of my own investigation and research, except to the extent indicated in the acknowledgements, references and by comments included in the body of the report, and that this dissertation is therefore, my original work and has not been presented in part or in full for any other degree in any other University.

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Supervisor Declaration – I, Mrs. CMR Tsikirayi confirm that the work reported in this dissertation was carried out by the candidate under my supervision as University supervisor. This dissertation has been submitted for review with my approval as University supervisor.

Signature………………………………… Date……………………………………

MRS. CMR TSIKIRAYI

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DEDICATION

This research project is dedicated to the Lord Almighty God who gave me the strength to do this research study. I also want to dedicate this project to my family, relatives and friends.
ACKNOWLEDGEMENTS

Preparation of this dissertation is a synergistic product of many minds. I am forever grateful to the inspiration and wisdom of many great men and women who, through their commitment and passion for realizing their potential, I have left a legacy to motivate me and my generation. On this score, a special mention to my fellow students, Tinovongwa Musenyereki and Leon Nyasha Makarange, my wives Juliet Kanjera and Ruth Tendai Mutendi. I will always be grateful to His almighty who led me through a very tough and thorny road up to this end.

As a leader of a company, I had pressure from business and as a family man I also had pressure from my wives, children and the extended family that was left by my late father when he died in 2003. As a student I had to do my university work and also to attend to church meetings and services, in Bikita to attend to villagers as the Village Head. I want to acknowledge my biological parents who brought me into this world. Thank you very much! Although my father is now late, I remember at one time he sold a beast when I cried to go for education. To my mother, thank you very much. It has always been inspiring although it was not clear to her as to what I was doing but she had always to ask “Ko chakadii chikoro, munoped za riniko?” I am proud to say that I am their product.

To my children thank you for always encouraging me and for each time asking for the marks obtained on my assignments and class tests. On this note my special thanks to my son Togarepi Tapiwa Kanjera who at times escorted me to the examination hall. To my workmates at Focus Construction, I salute you and thank God for you. There were so crucial times you wanted my presence but you bravely took even some decisions which were treacherous to the company without my consultations but thank God we managed to kip afloat to date. On this note my special thanks goes to Collen Chibarwa who used to laugh at me when I talked about my schooling. I want to say to him he should prepare to slaughter a beast at my graduation ceremony.

It will be morally wrong for me not to mention my spiritual father Archbishop Isaac Masuka for the prayers whilst I was on my MBA programme. To the Masuka clan, thank you for encouraging me always. My acknowledgement will not be complete without mentioning or recognizing my supervisor Mrs. C.M.R. Tsikirayi, for guiding me throughout the preparation of this dissertation. You committed a lot of your time reviewing the progress of my dissertation. Thank you! To the construction industry and the boards in the construction sector, thank you for the information which has been employed to make this project a success.
ABSTRACT
The aim of this study was to assess the applicability of competitive intelligence as a source of sustained competitive advantage in the construction industry of Zimbabwe. Literature provides a six stage intelligence cycle against which competitive intelligence can be assessed. Numerous studies have been conducted on the use of competitive intelligence in other countries but not in Zimbabwe; hence this research attempted to close the research gap by investigating into the applicability of competitive intelligence in the construction industry.

A triangulated research philosophy based on a case study strategy was adopted to solicit perceptions of the respondents of this study. A total of 35 questionnaires were distributed randomly to management and staff at Focus Construction. The questionnaire consisted of closed and open-ended questions for easy analysis. Thus, data analysis of responses was based on frequencies (extracted from SPSS v19) as well as content analysis in order to derive meaning from the data gathered.

The study showed the applicability of CI as a source of sustained competitive advantage. The study recommended to management at Focus Construction that they should adopt CI systems, train their staff on how to gather, analyze and report CI, set an internal CI audit and research and development departments, to make CI a part of every employee’s job and to inculcate a high performing and competitive culture.

Areas of further study should focus on assessing the impact of construction ICT infrastructure on the performance of construction companies, evaluating CI as a strategic tool in the construction industry and investigating whether training of staff on CI would improve competitive strength of organizations in the construction industry.
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<td>Agricultural and Rural Development Authority</td>
</tr>
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<td>CI</td>
<td>Competitive Intelligence</td>
</tr>
<tr>
<td>GIA</td>
<td>Global Intelligence Agency</td>
</tr>
<tr>
<td>GNU</td>
<td>Government of National Unity</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>KITS</td>
<td>Key Intelligence Topics</td>
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<tr>
<td>PEST</td>
<td>Political Economic Social and Technological</td>
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<td>SADC</td>
<td>Southern Africa Development Community</td>
</tr>
<tr>
<td>STEEP</td>
<td>Social, Technological, Economic, Environmental, Political</td>
</tr>
<tr>
<td>SWOT</td>
<td>Strengths Weaknesses Opportunities and Threats</td>
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<td>ZESA</td>
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CHAPTER 1: INTRODUCTION

1.0 INTRODUCTION

This Chapter consists of the background of the study, case study background, statement of the problem, research objectives and research questions. Research delimitation, research limitation, justification of the study and the general outline of the whole study are also discussed in this section. It ends with a section summary and conclusions.

1.1 BACKGROUND OF STUDY

“The much publicized seminal work by Porter (1980) on strategic management and competitive analysis, which concentrated on monitoring specific competitor behavior and aligning competitor analysis to competitive strategy, marked an avalanche of publications on competitive intelligence” (CI) (Saayman et al. 2008: 384), and established the Society of Competitive Intelligence Professionals in 1986 (Peyrot et al., 2002: 748 as quoted by Viviers et al. 2005: 578). Much of the CI research began and concentrated in Western countries case studies of corporate CI activity in different settings Viviers et al. (2005).

According to Saayman et al. (2008: 384): CI studies were done on life insurance companies (Fletcher and Donaghy, 1993), the forest products hardboard industry (Munk and Shane, 1994), electric utility regional cooperatives (Galing, 1995), banks (Boucher, 1996), the health care industry (Austin et al., 1995) and multi-industry examples (Lenz and Engledow, 1986; Ettorre, 1995). Other studies in different settings include the controversial study of CI on the Greek economy by Priporas et al. (2005) and Portuguese firms done by Magrinho et al. (2006). In recent years, similar studies have been conducted in South Africa by Kruger (2010), Viviers et al. (2005), Heppes and Du Toit (2009), Pelsmacker et al. (2005),and Strauss and Du Toit (2010). Nasri (2011) also conducted a study of CI on Tunisian companies. Wright et al. (2002) note that, out of a total of 702 articles on competitive intelligence, the majority concentrated on the Unites States and Canadian
firms meaning that CI studies have been concentrated mostly on developed countries. This study sought to contribute to the growing research evidence on the application of the use of CI in Zimbabwe, specifically in the Construction Industry. This study was conducted at Focus Construction to find out whether the results obtained supported literature.

1.2 BACKGROUND OF THE CONSTRUCTION INDUSTRY

According to Aaby and Discenza, (1995) as quoted by Priporas et al. (2005: 659), changes in the business environment are driven by advancement in technologies, variability in economic and social factors (Wheelen and Hunger, 1998 as quoted by Priporas et al., 2005: 659), and short product life cycles, which lead to “hyper-competition” (Chakravarthy, 1997 as quoted by Priporas et al., 2005).

The Construction Industry in Zimbabwe is faced with rapid changes in the business environment, thus the need for the acquisition of information, turn it into knowledge, and model it into intelligence relevant for decision making and strategic management. It is against this background that the study was conducted to investigate the applicability of CI at Focus Construction.

1.2.1 MACRO-ENVIRONMENTAL ANALYSIS

The process of analyzing the external environment, also known as the macro-environment, is sometimes described as a “PEST” analysis (Kermally, 2004). Morden (2007: 94) states that the acronym PEST stands for “Political, Economic, Social and Technological factors”. Commenting on PEST factors, Kermally (2004:147) stated that PEST factors influence significantly how business is conducted. The subsequent paragraphs below illustrate how PEST factors influenced the way business is conducted in the local Construction Industry under during the period under review.

1.2.1.1 POLITICAL FACTORS

“These refer to government policy such as the degree of intervention in the economy. What goods and services does a government want to provide? To
what extent does it believe in subsidizing firms? What are its priorities in terms of business support” (Oxford University Press, 2007:35). Hitt et al. (2010: 46) wrote that “the political/legal segment is the arena in which organizations and interest groups compete for attention, resources and a voice of overseeing the body of laws and regulations guiding the interactions among nations”.

The Construction Industry generally receives favorable financial support from the government compared to other sectors, as it is regarded integral to the development of the country as evidenced by national budget figures allocated to the industry. Despite the favorable support, however, the nation has been hard hit by liquidity challenges. This has resulted in very few individuals affording to save money for construction purposes. The high political risk and national debt have resulted in the country not being able to mobilize adequate financial resources for industry in general. Zimbabwe is a member of SADC where trade among member countries does not attract duties (SADC, 2011). The free trade zone removed trade barriers, presented opportunities and threats and intensified competition within the region.

Kermally (2004: 146) noted that geographic boundaries are ceasing to be barriers to trade and competition. The political environment in Zimbabwe is uncertain and largely associated with policy inconsistency and reversal (Stanbic Bank, 2011) and this requires the Construction Industry to timely read and synthesize the political environment to remain competitive. However, the introduction of the Government of National Unity (GNU) in 2009 brought some political stability in Zimbabwe though there is some confusion concerning when the next elections would be done since the GNU has out-lived itself.

1.2.1.2 ECONOMIC FACTORS
According to Oxford University Press (2007), economic factors include interest rates, taxation changes, economic growth, inflation and exchange rates. Kermally (2004: 146) argued that demand depends on economic
factors such as wealth distribution, purchasing power, economic growth, consumer spending, inflation, unemployment, and interest rates. After the introduction of multi-currency in the economy, generally production capacity in some industries in the country increased rapidly to between 25-50 percent (National Budget, 2009). However, the use of multi-currency intensified competition from foreign companies as it eliminated the exchange rate risk and presented favorable opportunities for foreign companies to compete in the local Construction Industry. The tight liquidity in the economy increased the cost of borrowing in the open market and generally banks are offering short term loans whereas the Construction Industry is in need of long term capital. The cost of money in the country rapidly fluctuates relative to money supply with the Central Bank having no control due to the institution’s inability to perform the lender of last resort function. In March 2011, lending rates were averaging 22.5 percent per annum, which is very expensive compared to other countries such as South Africa (9%) and Botswana (11%) (Stanbic Bank, 2011).

The adoption of multi-currency by the Central Bank meant that the state’s capacity to regulate the economy through the monetary policy was eroded (Hawkins as quoted by Madera, 2011). This implies that the Central Bank no longer had control over exchange rates and interest rates. The local Construction Industry is therefore exposed to volatility in the exchange rate of the United States dollar and needs to watch closely developments in the global exchange market. Hitt et al. (2010: 45) pointed out that because of the globalization of economies; “companies must scan, monitor, forecast and assess the economic affairs of their host countries as well as foreign countries.”

1.2.1.3 SOCIAL FACTORS
Kermally (2004:145) states that social factors relate to changes taking place in a society. These changes apply to social attitudes, social values, and changes in the educational system, life styles, structure of household, and ageing population. Morden (2007: 99) noted that social and cultural factors
have a direct impact upon people’s attitudes, consumer and business behaviour. Social trends, changes in education or the attitudes to work and leisure, and changing expectations, all affect the operation of the organization.

The Construction Industry has seen customer preferences rapidly changing with new tastes and perceptions being developed by customers, which can be met by improving or developing new products like residential underground parking in low density suburbs. Robinson and Pearce (2005: 179) noted that business is now feeling great pressure to respond to the expectations of society more effectively. Failure to move along with changing customer perceptions has developed a gap between locally produced properties with customer needs. As a result, foreign companies have capitalized on that gap and tailor made products that suit the current market. New standards have been set, especially in the housing market where customers want to keep pace with international trends. The multi-currencing era has brought real savings and people’s life styles have changed drastically from being tenants to landlords, be it on housing or commercial settings (Hawkins in Madera, 2011).

1.2.1.4 TECHNOLOGICAL FACTORS

Oxford University Press (2007) identified that technological factors include innovation, new product development, and rate of technological obsolescence. According to Chininga (1999), most machinery in the Construction Industry is old, dilapidated and generally not based on state of the art technologies and is not as efficient as modern large plants that use advanced technologies. According to Montgomery and Weinberg (1979:43), the technological environment is crucial not only because of its evolutionary impact on existing products but also because many innovations are introduced from outside a traditional industry. Mellow (1989), as quoted by Priporas et al. (2005: 661), echo the same sentiments and states that “the people who kill you these days are not even your existing competitors”.

The Information and Communication Technology (ICT) infrastructure of the nation leaves a lot to be desired. Notably most government assets and equipments are fairly old and this has a strong bearing on the service delivery. ICT still needs to be introduced in a number of ministries for example; ministries such as the Ministry of Public Works and Agriculture need up-to-date ICT infrastructure. In these ministries, there is very little automation and given the fact that their services need to be done expeditiously and extensively integrated, there is a tendency of the inefficiencies, thus impacting negatively on service delivery and consequently the overall performance of such ministries. In this regard government is incurring heavy costs of poor quality arising from inefficient services from parastatals like, ARDA, ZESA, City Councils, to list but a few.

Poor ICT infrastructure from public utility service providers such as ZESA and City Council affect the performance of the companies in their value chain system and Focus Construction is no exception. This has caused Focus Construction to incur huge expenses from these public utility service providers emanating from their outdated and poor billing systems. Tel-One’s ICT infrastructure has also caused problems to Focus Construction in that their telephone services most of the times are down and this affects business as customers and suppliers find it difficult to access the company over the phones. In addition, the ICT in the construction industry is old, dilapidated and out-dated. This has resulted in poor service delivery (Chininga, 1999).

1.2.2 CONSTRUCTION INDUSTRY ANALYSIS

Broadly, the construction industry is complex and cannot be easily be classified into segments. Porter’s Five Forces Model was used to analyze the Zimbabwean Construction Industry as detailed below.

1.2.2.1 RIVALRY

Globalization has intensified competition in the local construction industry. Traditionally, only local companies used to tender for local municipalities property business. Nowadays a number of foreign companies participate in local tenders thereby increasing the scope and intensity of rivalry. Business is
no longer confined to traditional boundaries and competition has become intense in the export market. In 1995, R. Davis, a South African company, entered into the local construction market and acquired about 9% of the total aggregate market (Townsend, 1999). More than 250 big properties were erected during the period of 2007 (Townsend, 1999: 112). There is an influx of small and big players in the construction industry and this has intensified the competition in the construction industry. Most construction firms’ competitive advantage has been worn-out due to intense competition and as such companies need to devise sustainable competitive advantage if they are to survive in the construction industry.

1.2.2.2 THREAT OF ENTRY

Whilst a high level of capital is required to enter the construction industry, this is no longer a barrier to entry as a small company can, for example, establish a strategic alliance with big and reputable construction companies in Asia or even within the SADC region and provide distributorship of building materials in Zimbabwe. Numerous business relationships have been developed with the view of unlocking value in a market. There is relative ease to enter into Construction Industry as no restrictive regulation exists. Also due to the National Economic Empowerment Policy in Zimbabwe, small construction companies have sprouted in Zimbabwe since 2009.

1.2.2.3 THREAT OF SUBSTITUTES

In the case of the Construction Industry there are some substitutes available for example, some companies use metal containers as offices. However, due to the need for proper buildings the industry profitability is cushioned in that regard.

1.2.2.4 BARGAINING POWER OF SUPPLIERS

The local Construction Industry has two broad classes of suppliers, namely providers of engineering spares and raw materials. There is a large number of engineering spares suppliers. As a result, the local construction industry holds the balance of power regarding negotiating for lower prices making the industry attractive. As a result of the existence of very few suppliers,
backward integration is prevalent in the local construction industry. Focus Construction, for example, is integrated with Lafarge to ensure control in the supply of cement and other building materials. It has Beta Holdings as its strategic partner for the supply of bricks and tiles.

1.2.2.5 BARGAINING POWER OF CUSTOMERS

Broadly, switching costs in the local construction industry are low, resulting in high customer bargaining power as customers can easily forgo one company and buy the same product from another company, since most products in the local Construction Industry are homogeneous. The industry can therefore be regarded as price elastic such that if a company increases its prices, demand for that company’s product will fall. Globalization has resulted in customers in the industry being able to buy products such as residential houses and commercial buildings in any part of the world thereby reducing the monopolistic powers that once characterized the industry and increasing the bargaining power of local customers.

1.3 BRIEF BACKGROUND OF THE ORGANIZATION

Focus Construction is a privately owned construction company that incorporates Star Plumbers, Super Painters and Stone King. The company specializes in construction and maintenance, painting, tiling, plumbing works, civil works, water tanks and irrigation reticulation systems. Focus Construction is a player, not only on the local markets but also on the regional markets. The organization is facing intense competition from both big and small market players despite having a 33% market and big asset base. It is management prerogative to devise a winning strategy to out-compete their competitors.

1.4 STATEMENT OF THE PROBLEM

As cited in the industry analysis section of the background to the case study above, Focus Construction is facing serious problems in terms of intense competition from both existing and an influx of small and big market players. This problem exists in spite of Focus Construction enjoying a good market share, having a big asset base and a strong strategy. The management
problem is, therefore, to find out how Focus Construction can successfully devise a sustainable competitive advantage using CI systems over its rivals. It is against this background that this study is aimed at investigating whether the application of Competitive Intelligence would help improve the competitive advantage for Focus Construction.

1.5 RESEARCH OBJECTIVES
The primary research aim of this study is to investigate the applicability of CI system in the Construction Industry. The objectives of the study are:
1.5.1. To establish whether Focus Construction’s strategy, culture and structure would support the adoption of CI systems.
1.5.2. To ascertain the particular activities in the CI system.
1.5.3. To determine Focus Construction’s source and methods of collecting intelligence.
1.5.4. To establish the competitive analytical tools used to convert information into actionable intelligence in the local construction industry.
1.5.5. To determine the key drivers which make competitive intelligence systems a source of sustainable competitive advantage.
1.5.6. To make recommendations on how to improve CI for competitive advantage at Focus Construction.

1.6 RESEARCH QUESTIONS
1.6.1. Do Focus Construction’s strategy, culture and structure support the adoption of CI systems?
1.6.2. What are the particular activities involved in the CI system?
1.6.3. What is Focus Construction’s source and methods of collecting intelligence?
1.6.4. What are the competitive analytical tools used to convert information into actionable intelligence in the construction industry?
1.6.5. What are the key drivers that make competitive intelligence systems a source of sustainable competitive advantage?
1.6.6. What recommendations can be made to improve CI for competitive advantage at Focus Construction?
1.7 RESEARCH JUSTIFICATION
It is envisaged that the research will help the construction industry to effectively develop robust CI systems that will improve national competitiveness. The research will also contribute to a body of knowledge on the strength of CI activities in the construction industry. There is limited literature on CI systems in Zimbabwe and this study seeks to close this gap.

Management at Focus Construction will gain insights into the benefits of adopting CI for sustained competitive advantage. For the academics, the research will be able to link theory and practice, and in the process assist to better understand the concepts learnt in programme. Finally, the researcher, who is employed in the construction industry, will benefit significantly as the evaluation of the results will assist in making recommendations at his work place.

1.8 RESEARCH PROPOSITION
Focus Construction’s competitive strength in the construction industry is weak due to lack of Competitive Intelligence.

1.9 RESEARCH DELIMITATIONS/SCOPE
The research focuses on investigating the application of CI in the construction industry with Focus Construction as the case study. The research subjects were confined to this organization.

1.10 RESEARCH LIMITATIONS
There is a possibility that some respondents could view the information sought as sensitive and as a result certain information may be withheld by the respondents.

1.11 STRUCTURE OF THE DISSERTATION
The dissertation consists of five chapters as illustrated below:
1.11.1 CHAPTER 1: THE INTRODUCTION
It covers the background of study, statement of the problem, research objectives, research questions, research justification, research proposition, and research delimitation. The subsequent chapters are organized as follows:

1.11.2 CHAPTER 2: LITERATURE REVIEW
This chapter critically reviewed the studies and works of other authorities on the subject of CI. The chapter ends with a summary of key issues under the review of the literature.

1.11.3 CHAPTER 3: RESEARCH METHODOLOGY
This chapter specified the research methodology used to get answers to the research questions identified in chapter 1. It sought to justify the adoption of the research philosophies, approaches, strategies, data collection and data analysis methods suitable for this study.

1.11.4 CHAPTER 4: RESEARCH FINDINGS, ANALYSIS AND DISCUSSION
Chapter 4 produced an analysis of the research findings and tested the research proposition of the study.

1.11.5 CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS
Based on Chapter 4, Chapter 5 outlined the conclusions and recommendations based on the research findings.

1.11 CHAPTER SUMMARY AND CONCLUSIONS
Chapter One provided the introduction to the research project. The impact of the external environment to the construction industry was analyzed using the PEST analysis and the competitive forces operating in the industry were analyzed using the Porter’s five force model. The statement of the problem was also highlighted to show the thrust and heart of the study. The research objectives, research questions and the significance of the study were also
articulated in this chapter. The next chapter concentrates on the literature which supports the research questions highlighted in Chapter 1.
CHAPTER 2: LITERATURE REVIEW

2.0 INTRODUCTION

Mouton (1996) defines literature review as a “map” or “maps” of the terrain. On the other hand, Fouche and Delport (2002) state that literature review is aimed at contributing towards a clearer understanding of the nature and meaning of the problem that has been identified. “The review of literature provides the background and context for the research problem. It should establish the need for the research and indicate that the writer is knowledgeable about the area” (Wiersma. 1995:406 cited in Pajares, 2007).

This chapter gives a critical evaluation of the conceptual literature which underpins the study to provide a conceptual framework that supports the study of CI. First, the literature review briefly narrates the history of CI, key drivers of CI, utilization of CI and benefits of CI. The various definitions of CI are reviewed before proceeding to a comprehensive discussion of the intelligence cycle and CI tools against which a CI system is developed.

2.1 A BRIEF HISTORY OF CI

Evans (2007:11) argues that Chinese people are the fore-fathers for CI. He went on to quote the Chinese saying:

“Know thy-self, know thy competition, and get it right almost every time.”

“Know thy-self, not know thy competition, and get it right about half the time.”

“Not know thy-self, not know thy competition, and get it wrong almost every time.”

According to Juhari and Stephens (2006) the concept of CI has a rich legacy which, according to Qingjiu and Prescott (2000), dates back for 5,000 years of Chinese history. Numerous articles on CI refer to the work of General Sun Tzu, who, according to Prescott and Miller (2001: 19), is regarded as the father of intelligence. General Sun Tzu authored The Art of War, which provides detailed descriptions on how to develop intelligence for military actions (Juhari and Stephens, 2006: 66). Sun Tzu as quoted by Tyson
(2002:3), wrote that, “what enables the wise to strike and conquer, and achieve things beyond the reach of ordinary men is foreknowledge”. Nakagawa (1993), as quoted by Juhari and Stephens (2006: 66), gave yet another popular quotation by Sun Tzu that, “If we understand and know our enemy and also ourselves, we shall never be put in a risky position even if we fight 100 times.”

Gordon (1989) notes that during World War II, both Allied and Axis strategists monitored the enemy and tracked the history of the battles fought by key commanders. The intelligence gained from this leadership profiling was then used to assess the probable outcomes of different moves.

Prescott and Miller (2001:2) attributed the work of James Bond’s series of movies and John LeCarré’s (a former British secret agent) set of novels to have proficiently contributed to the discipline of CI. All of these works have sensitized the business community to the value of intelligence. Equally important, they have constructed public opinion of intelligence in terms of espionage, clandestine, stealthy, and secret agents (Prescott and Miller, 2001). Shadowed with this atmosphere, the business community began to develop a set of intelligence concepts and analytical frameworks appropriate for their context and acceptable to scrutinizing stakeholders (Prescott and Miller, 2001). Pioneered by the Society of Competitive Intelligence Professionals (SCIP) and a few academics, the field of CI surfaced (Prescott and Miller, 2001). SCIP was formed in 1986 to provide education and networking opportunities for CI professionals (Juhari and Stephens, 2006: 74). Other professional companies in the United States of America such as Fuld and Company have been developed in the late 2000s.

2.2 DEFINITIONS

A review of some literature related to intelligence suggests that it is a marketing discipline aimed at collecting competitor information (Schollhammer, 1994 as quoted by Calof and Dishman, 2008: 768). However, a deeper examination of literature indicates that CI is not only restricted to
monitoring competitors, but also includes tracking changes in the holistic business environment (Murphy, 2005: 6). Lauginie et al. (1994: 23) as quoted by Wright et al. (2002: 351), writes that, “competitor intelligence is not competitive intelligence but part of it”. CI is more than competitor intelligence and includes monitoring all business environment variables (Calof and Dishman, 2008: 768; Calof and Wright, 2008: 723; Strauss and Du Toit, 2010: 304; Me’lo and Medeiros, 2007: 207; Murphy, 2005: 6; GIA, 2004a: 2; Prescott and Miller, 2001: 12). The conceptual framework of CI is shown in Figure 2.1 below. An ideal definition of CI which this study will adhere to is by SCIP (2008) as quoted by Saayman et al. (2008: 385) who define CI as:

“A systematic and ethical process for gathering, analyzing and managing external information that can affect the company’s plans, decisions and operations”

2.2.1 THE CONCEPTUAL FRAMEWORK FOR CI

![Conceptual Framework for CI](image)

Figure 2.1: The conceptual framework for CI
Source: Global Intelligence Agency (2004a: 5)
It is important to emphasize what CI is not. Pelsmacker et al. (2005: 607) argue that, “CI is not just monitoring secondary sources such as news clippings”. Priporas et al. (2005: 661) review the works of Wright et al. (1999); Prescott (1995); White (1998); Attaway, (1998); Walle (1999); Vedder and Guynes (2000/2001) and state that CI is commonly mistaken with market research. However the major difference between the two lies in the collection and analysis of information. Sharp (2009: 27) notes that “market research tends to focus on customers, is mostly quantitative, measures opinions, and mostly reflect what has occurred.

CI is more qualitative and future focused, looking at what is emerging in a market or industry, and has a broader scope, including many more external factors”. The confusion between market research and CI is evident in practice. Priporas et al. (2005:662) quoted a survey done by Wright et al. (1999: 2002), where, out of the 39 small companies in the study, 21 thought that CI is just simple market research. A global research conducted by Global Intelligence Agency (2005: 7) concluded that 30 percent of the respondents labeled CI as market research, confirming the confusion.

CI is not industrial espionage (White, 1998:248; Prescott and Miller, 2001:12; Wright and Roy, 1999; Fleisher and Blenkhorn, 2003: 5; Lemos and Porto, 1998: 331; GIA, 2004a: 3; Dutka, 2000:16; Sharp, 2009:27). It is restrained to the gathering of public information (Chen etal, 2001:2; Zangoueinezhad and Moshabaki, 2009:264; McGonagle and Vella, 1999: 4; Adidam et al., 2009:666). There are words such as market intelligence, strategic intelligence, corporate intelligence, and business intelligence which are synonymous to CI (Global Intelligence Agency, 2004a: 2). For the purpose of this study, only the word competitive intelligence shall be used, as it truly depicts the main objective of intelligence, which is to gain competitive advantage.

Global Intelligence Agency (2004a:108) argues that CI systems work in some organizations and do not work in others, depending on the strategy, culture and structure of the organizations. The debate on what type of organizations
where CI systems would be most effective has been going on since early 90s (Spears, 2005). Hughes (2008) argues that for CI to be most effective, there should be a fit between the strategy, culture and the structure. The following paragraphs serve to illustrate the link between strategy, culture, structure and CI systems.

2.3 THE LINK BETWEEN STRATEGY, CULTURE, STRUCTURES AND CI SYSTEMS.

According to Grant (2005), for most organizations, the fundamental strategic objective is to achieve the best performance possible. Smith (2005) contends that success or failure depends on many factors. Central among them always, is the appropriate beliefs, values and assumptions that feed the organization’s behaviours and decisions – in a word, ‘culture’. Dubith (2007) posits that organizational culture cannot be described as good or bad, right or wrong. Rather, it should be judged on whether it is suited or not to the organization’s strategic intentions. This makes culture and strategy two sides of the same coin: a problem with one will affect the other (Thurow, 2009). Conversely, the success of one presupposes the success of the other (Thompson etal, 2010).

Green (2008) argues that the organization’s achievement of its strategic intentions depends on the development or shaping of culture to service these intentions. When due consideration is not paid to culture, a disparity between strategy and culture can compromise the organization’s strategic outcomes. Crucially, a shift in strategic direction necessitates a corresponding reshaping of culture (Kotter and James, 2002). Because culture is vital both to the formulation and implementation of a new strategy, cultural change is the key to successful strategic change (Deal and Kennedy, 2002). Gora (2009) argues that CI is a strategic tool that needs to be in line with a company’s strategy, culture and organizational structure. In concurrence, Robson (2006) added that CI systems are easily implemented in organizations that have flat organizational structures. “CI is like a grenade that needs to be used at the right time and place before an enemy attacks you first”, (Sather, 2009:15).
Empirical research evidence by Douay (2010) reveals that CI systems are most effective in organizations that have flat structures, high performing cultures and powerful strategies. Current research literature by Fibio (2012) states that CI systems are most effective in organizations that can make fast decisions and are characterized by a high performing culture. CI systems are most powerful in organizations that have a strategy-culture fit, argues Ahudjen (2011).

2.4 THE INTELLIGENCE PYRAMID

McGonagle and Vella (1996: 9) noted that, “it is the characteristic of today’s intelligent organizations to seek, process and use information about the external business environment to manage the future”. The Global Intelligence Agency (2004a: 3) pointed out that what changes information into intelligence is formatting it into forecasts and using it in futuristic decision-making. It is therefore, important to note that information and intelligence appear at distinct levels in the “intelligence pyramid”.

The intelligence pyramid has many variations, depending on the author, despite the majority agreeing on the first three levels, consisting of data, information and knowledge; there is debate on the subsequent levels. Liebowitz (2006:7) as quoted by Kruger (2010), for example, recognizes that subsequent levels in the intelligence pyramid after knowledge are expertise and wisdom in that order. For the purpose of this study, the research adopted the research pyramid identified by Global Intelligence Agency (2004a), which is depicted in Figure 2.2 below. The intelligence model by Global Intelligence Agency (2004a: 4) captures intelligence as the last level in the pyramid.
Evans (2011a:2) asserts that “differences between data, information, and intelligence can be subtle, but very real. Data is unconnected pieces of information which are nice to know, but so what. Information on the other hand is increased knowledge derived by understanding the relationships of data: Interesting, but how does it relate to what I do”. Finally, “intelligence implies organizing the information to fully appreciate the implications and impact on the organization: Oh really, then we better do something” (Evans, 2011a).

Intelligence allows someone to act on it and understand their options; giving them an opportunity to make forward-looking decisions. In summary intelligence is actionable (Global Intelligence Agency, 2004b:4). The transformation of data to intelligence is cornerstone to this study as it provides actionable intelligence to gain competitive advantage. “Intelligence is the lifeblood of strategy” (Global Intelligence Agency, 2004a: 3) or as Montgomery and Weinberg (1979: 41) put it, “A strategic plan can be no better than the information on which it is based”. Smith (2005) argues that these functions entail the decision points and scenarios that can be taken by organizations.
Montgomery and Weinberg (1979: 49) and Fleisher and Blenkhorn (2000: 87) identified six functions namely: transmission, accumulation, aggregation, analysis, pattern recognition and mixing—by which data can become intelligence. These functions work in the process of building up intelligence. Montgomery and Weinberg (1979: 49) wrote that “although the six functions overlap, each has at its core a distinctive transformation. Obviously, the functions do not necessarily occur sequentially and can occur at several levels in an organization”.

2.5 KEY DRIVERS MAKING CI SYSTEMS A CRITICAL FUNCTION

Tyson (2002: 3) and Smith (2005: 87) argue that CI is a business necessity due to various conditions that exist in today’s business environment. The use of wireless communication, personal computers and internet, has, according to Kahaner (1996: 28-31), accelerated the speed and availability of communication resulting in companies faced with information overload. There is too much information for any decision maker to process and analyze in a day. Me’lo and Medeiros (2007: 207) highlighted that “hyper-information makes keeping up with information simply by reading, impossible”.

The fast pace of the business environment is also considered as a key driver of CI. Hannula and Pirttimaki (2003: 20) wrote that, “such complex and unstable environment necessitates a growing need for timely, first-rate business information and knowledge”. Guimaraes (2000: 117) supports Tyson (2002: 3) that increased global competition from new competitors is a key driver of CI. Me’lo and Medeiros (2007: 207) note that the increased use of the concept of CI in the 1990s, particularly in the United States, has been a function of globalizing the economy.

According to Tyson (2002: 3), existing competition is becoming more competitive, therefore making CI important. Rapid technological change and innovation is also a key driver of CI (Tyson, 2002: 3). Montgomery and Weinberg (1979: 42) contend that, from a strategic perspective, the long term existence of a company requires, as one aspect constant monitoring of
emerging technologies. Political and regulatory changes are affecting industries quickly and forcefully.

2.6 UTILISATION OF CI SYSTEMS
Murphy (2005: 11) came up with three levels of utilization of CI which are sleepers, reactive and active. Other authors (Tan and Ahmed, 1999) use the terms, ad hoc, regular reviews and continuous monitoring to analyze the frequency of utilization of CI. According to Murphy (2005: 11), sleeper are companies with "no deliberate CI activity and are led by passive managements who believe that they already know all they need to run the business and are blinkered by a dismissive ‘not invented here’ attitude to learning from the outside world." The reactive group does not regularly conduct CI but may do so on an ad hoc basis when faced with a competitive challenge, which is being reactive (Murphy, 2005: 11). The active group consists of companies with an active and permanent CI function and tries to anticipate opportunities and threats rather than respond to them when they become prominent. Modest resources will be devoted to the activity.

2.7 BENEFITS OF CI SYSTEMS
According to Bose (2008: 511), the main output from CI is the ability to make forward looking decisions. Calof (2004) concurs with Bose (2008) and states that CI provides forward looking views about the environment. This is also in line with Rodenberg (2007: 165), who characterized CI as being future focused and proactive. Karl Rose, a Chief Strategist at Shell, is quoted by Fuld (2010: 5) as saying that Shell’s intelligence time frame stretches up to the year 2050. Evans (2011b: 4; West, 2001: 34) alluded to the fact that no organization can remain static and assume business conditions remain unchanged in perpetuity. Burnes (2004) argues that the only variable which is constant in business is change and according to Fuld (2010: 2) “you have to be paying attention”. Bose (2008: 512) pointed out that CI can assist companies to validate the assumptions they make.

Myburgh (2004), as quoted by Nasri (2011: 55), identified the objectives of CI systems which include managing and reducing risk, make knowledge
profitable, avoid information overload, ensure privacy and security of information, and use corporate information strategically. Viviers et al. (2005) and McGonagle and Vella (2002) highlighted that the main advantage of CI systems is to gain strategic advantage as it gives the ability to predict movements in the competitive environment, thereby reducing the uncertainty of managerial decisions and actions. CI systems have the ability to boost an organization's profits if used and developed correctly, based on the organization's needs, internal organization and competitors (McGonagle and Vella, 2004).

Fleisher and Blenkhorn (2000: 79) highlighted that CI systems predict future developments and explain the implications to decision makers. They added that it makes data more meaningful and provides guidance to decision-makers considering goals and the alternative means of achieving them; providing warnings of major developments, events, trends, and assessments based on empirical evidence, thereby helping policy-makers avoid unpleasant surprises; and they provide pieces of current information on specialized topics of concern to decision-makers”.

Despite the benefits mentioned above, Malrz and Kohli (1996) argue that numerous companies fail to make use of information freely available to them. An ideal CI system, according to Nolan (1999), should provide the necessary information for decision making in time to make a difference and in time to implement correct actions. CI is associated with first mover advantage. The competitive edge is not based on the information acquired, but according to Buhler (2003), it is how the information is interpreted and disbursed that makes the difference. It is necessary to emphasize that for a company to maximize these benefits, CI must be supported by an intelligent strategy (Global Intelligence Agency, 2004b: 8).

Empirical evidence exists which suggests that there are benefits in gathering intelligence. Whilst analyzing the contingency theory, Miller (1975) as quoted by Montgomery and Weinberg (1979: 45), came to the conclusion that performing companies tend to use more scanning than failing companies.
Grinyer and Norbum (1975) as quoted by Montgomery and Weinberg (1979: 45), concluded that there is a positive correlation between high financial performance and the use of more informal channels of information.

2.8 THE CI SYSTEM

From past studies, various authors (Bose, 2008; Fleisher and Blenkhorn, 2003: 18; Kahaner, 1996: 44; Bernhardt, 1994; and McGonagle & Vella, 1996) seem to be in support of distinct stages in CI practices. CI is both a product and a process (Priporas et al., 2005: 661; Bose, 2008: 512). The product is information on the competitors in the market, which is used as the basis for specific action. The CI system answers part of the current research questions and the key stages that emerge from the literature are, planning and focus, collection, analysis, communication, process/structure and organizational culture. These are discussed in detail in subsequent paragraphs:

2.8.1 PLANNING AND FOCUS

This is a prerequisite stage (Sawka, 1996) and involves working with decision makers to discover their intelligence needs (Bernhardt, 1994; Global Intelligence Agency, 2004a: 9; Bose, 2008: 513; Evans, 2011b: 3) and then translating those needs into their specific intelligence requirements or “key intelligence topics” (Bose, 2008: 513; Nasri, 2011: 56). In planning, it is necessary to answer the questions: “What information is needed? Why is it needed? When is it due?” (Bose, 2008: 513). The key intelligence topics (KITS) provide direction to the CI, making sure that CI focuses on collecting and analysing data pertaining to the KITS (Viviers, et al. 2005: 579 and Global Intelligence Agency, 2004b: 4). Evans (2011b: 3) further asserts that KITS give insights on what resources are required and avoids duplication of efforts, as KITS may overlap or complement each other.

Developing KITS can be achieved through periodic intelligence audits (Prescott and Miller, 2001: 5) or through regular meetings with managers (Evans, 2011b: 4). Du Toit and Muller (2004) stated that planning represents
80 per cent of the intelligence process, whereas the actual execution thereof represents only 20 per cent.

West (2001: 45) recognizes the need to prioritize and categorize the KITS in an organization. Murphy (2005) highlighted that “there is also the danger of scarce resources being wasted on collecting ‘nice to know’ intelligence, while the essential issues are neglected”. The classification of KITS can be based on adapting the tripartite military paradigm of (1) areas of influence, (2) immediate zone, and (3) area of interest (Montgomery and Weinberg, 1979: 44). Fleisher and Blenkhorn (2000: 14) classify intelligence needs according to three objectives, namely, defensive, offensive and informational. Smith (2005) argues that the three objectives are self explanatory as their names are leading words that show how they are used when fighting competition.

Defensive intelligence relates to understanding the potential moves that a competitor could make that would threaten the competitive position of the firm and developing responses to minimize or neutralize the threat. Offensive intelligence consists of assignments conducted to evaluate the impact of a strategic or tactical move on the industry and competitors.

Informational intelligence is conducted primarily for the purpose of gaining a better understanding of an industry or competitor, although no apparent action is necessarily being taken. Prescott and Miller (2001: 5) highlighted a very important aspect that intelligence needs within an organization differ, for example, intelligence required for tactical decisions differ from the intelligence required for strategic decisions. Such differences in intelligence needs will pose a great challenge to coordinate the KITS within the organization.

2.8.2 COLLECTION

Collection includes identifying all potential sources of information, researching and gathering the right data legally and ethically from all available sources (Bose, 2008: 513; Murphy, 2005: 45). The sources can either be primary or secondary (Viviers et al., 2005: 579; Evans, 2011a: 5), published or
unpublished (Saayman et al., 2008: 385; Rodenberg, 2007:165), internal or external to the company (Pelsmacker et al., 2005: 608; Evans, 2011a: 7). Evans (2011a: 5) recommends the 80/20 rule and suggests that 80% of the information is available from secondary sources and CI professionals should spend 20% of their time on collecting secondary information.

According to Evans (2011a: 5) 20% of the information should come from primary sources where the “golden nuggets” of CI reside and CI professionals should spend 80% of their collection time on primary sources. Montgomery and Weinberg (1979:45) identified government publications, competitors, suppliers, customers, company personnel and professional bodies as sources of intelligence.

Internal employees are a source of intelligence (Viviers et al., 2005: 579) and according to Montgomery and Weinberg (1979: 49), for employees to be an invaluable source of intelligence, they need to be trained. Evans (2011a: 7) gave examples of sales people, procurement personnel, senior managers, research personnel, call center personnel and legal personnel, as important sources of information. More time (80%) should be spent on internal sources of information than on external sources (20%) and very often, internal sources will lead to appropriate external sources (Evans, 2011a: 7). It is important to ensure that the information and its sources are tested for reliability and credibility (Montgomery and Weinberg, 1979: 49; Saayman et al., 2008: 385; Strauss and Du Toit, 2010: 308; McGonagle and Vella, 2002: 25; Fleisher and Blenkhorn, 2000: 86).

Herring (1998) as quoted by Viviers et al. (2005: 579) suggests cross-checking employees’ intelligence report with published data as one way to validate the accuracy of the intelligence source. Montgomery and Weinberg (1979: 49) further suggest that methods for assessing validity of intelligence source include comparison with other data which may be available from other sources, searching for associated indicators, and face validity.
Fleisher and Blenkhorn (2003: 19) stated that professionals involved in intelligence efforts cite the rise of internet and electronic commerce as the single greatest CI development in history. They noted that challenges in sourcing intelligence using the internet include, “the likely failure to determine the origin, nature or timing of the source of information on the internet and that pages and sites are here today and gone tomorrow and frequently exhibit short life spans”.

Evans (2011a: 6) pointed out that internet sources are opinionated and usually are subjective and unreliable. In line with this, Fleisher (2008: 858) recommends that analysts should base their insights on Information from authoritative, edited, and reviewed sources. Chen et al. (2001:5) note that “the push technology is used to monitor and filter information on the internet by automatically pushing related information to the user. Ewatch is one such example”. Ewatch monitors and filters information on the internet by automatically pushing related information to the user (Chen etal, 2001:6).

Another popular technique used for monitoring and filtering employs a software agent, or intelligent agent (Chen et al., 2001: 7). Personalized agent can monitor web sites and filter information according to particular user needs. To enhance the collection stage, various softwares have been developed and these include Excalibur Retrieval Ware, Internet Spider, Agent Server, Information Server, Intelligent Classifier and CI spider. This software monitors web sites and filter information according to particular user needs.

2.8.3 ANALYSIS

“This stage involves a systematic examination of relevant data, information, and knowledge collected, for applicability or significance, and the transformation of the results into actionable intelligence” (Bose, 2008: 513). Herring (1998) is quoted by Fleisher and Blenkhorn (2000: 78), as saying analysis answers the question “so what”. This stage is cornerstone otherwise one may end up with information overload but with intelligence deficiencies.
Adapting the work of Bensoussan (2002: 2), the main reasons why analysis is done ineffectively is because data that is used is historical or inadequate and that analysts apply the same tools repeatedly. Bensoussan (2002: 3) recommends that for any analytical tool to be intelligent, it needs to have six characteristics, namely, future oriented, accurate, resource efficient, objective, useful, and timely. The various competitive analytical tools are discussed in section 2.9.

### 2.8.4 COMMUNICATION

Prescott and Miller (2001: 7) argue that effective communication dominates analysis; unless the message from the analysis is communicated effectively, trust and credibility with intelligence users will not be enhanced. Similarly, Fuld (2010: 3) states that intelligence managers regard effective internal communication as one important priority of ensuring a successful use of CI efforts. Intelligence communication can take place via ad hoc reports, alerts, e-mails, presentations, news briefs, competitor files and special memos (Fleisher, 2001). Global Intelligence Agency (2008: 9) notes that “pure facts are very necessary to back up good business, but typically, the real intelligence is only generated when the facts are discussed and evaluated in a group of people”. There is need to ensure timely dissemination of intelligence to decision makers (McGonagle and Vella, 2003:9; Bose, 2008: 512).

Intelligence delivered too late may be useless regardless of whether or not it is thoroughly analyzed. Intelligence should be delivered in time to make a difference for the decision maker (Bose, 2008: 512). Evans (2011a: 18) noted that slowness is the enemy of CI. Prescott and Miller (2001:7) pointed out that it is important for intelligence to be packed in various media such as electronic form, paper version or verbally relayed to suit different intelligence users in the organization.
2.8.5 PROCESS/STRUCTURE

“CI requires appropriate policies, procedures, and a formal or informal infrastructure so that employees may contribute effectively to the CI system, as well as gain from the benefits of the CI process” (Saayman et al., 2008: 386). Vriens (2004) classifies intelligence structures into three sections, namely, the technological part which consists of information and communication technology (ICT) applications and ICT infrastructure that can be used to support the intelligence process; a structural part which defines and allocates CI tasks and responsibilities and the human resources part which is concerned with selecting, training and motivating personnel involved in CI activities.

There is much support for a formal structure and a systematic approach to CI (Murphy, 2005: 14; Dutka, 2000: 14). McGonagle and Vella (2002: 12) note that the absence of a formal and sanctioned CI structure leads to lack of collection and analysis of CI. In a similar vein, Fleisher and Blenkhorn (2000: 57) emphasise that organizational structure and culture need to be arranged so that communication occurs across business units. If an organization is not already communicating cross-functionally, it will be more difficult to implement an effective CI program.

There is a strong debate whether to centralize or decentralize the CI function. There is a possibility that decentralization might lead to less top management involvement and a loss of attention on the right things. CI is a strategic management tool, as such, should provide the necessary intelligence to top management. Prescott (1999) agrees that centralization is recommended as it enables the CI function to gain a holistic view of the entire organization. The ideal structure is a strong empowered centralized structure with function or specific groups more closely aligned to those functional teams (Best Practice LLC, 2004).

Farcot (2009: 1) notes that “more of today’s companies are seeking to provide more decentralized and actionable intelligence at the business unit level
mainly because there are unique needs, collection and analytical requirements at each business unit”. Dutka (2000: 13) argues that centralization of the competitive intelligence function tends to foster greater interaction with top management in strategic planning activities, while decentralization usually results in an emphasis on tactical decisions.

This research adopts the argument of Kahaner, (1997) that there is no “best practice” in terms of centralized or decentralized functions or the location of the function. This is because companies and industries differ in terms of attitudes, knowledge and values, as well as the environments/industries in which they function.

2.8.6 ORGANIZATIONAL AWARENESS/CULTURE

Organizational awareness of CI and a culture of competitiveness are critical for a firm to use CI as a successful competitive tool (Fuld, 2010: 6; Garvin, 1993; Sinkula, 1994; Slater and Narver, 1995). Senior management support is crucial for any CI activities (Fuld, 2010: 9; GIA, 2004b: 3; Du Toit and Muller, 2004), since management support reinforces importance and legitimacy (Fehringer et al., 2005 as quoted by Saayman et al., 2008). As indicated by Du Toit and Muller (2004: 3), “the CI process will fail if it does not receive the necessary support and if operation of intelligence by top management is not implemented”.

Fleisher and Blenkhorn (2001: 54) and Murphy (2005: 13) note that best-practice companies develop ways to make CI a part of everyone’s job. In concurrence, Prescott and Miller (2001: 11) advised that institutionalization of CI into a company’s culture requires top management involvement and the process takes time and commitment. “In organizations, an intelligence-driven culture is built one person at a time, through intelligence skill enhancement, human network development, and mechanisms that facilitate the flow of information”, Prescott and Miller (2001: 11).
Global Intelligence Agency (2004b: 10) rightly pointed out that an important attribute that supports a competitive culture is trust. Trust is critical, for example, in converting knowledge of individuals into organizational knowledge. An organization characterized by “a culture of honesty and commitment will have a fluid flow of knowledge, whilst an organization grounded with back biting and power bases will experience a slowdown in the flow of information” (Global Intelligence Agency, 2004b: 10).

2.9 COMPETITIVE INTELLIGENCE TOOLS
Fleisher and Bensoussan (2003) came up with five categories of techniques used to analyze business environment, which are:

- strategic analysis techniques
- competitive and customer analysis techniques
- environmental analysis techniques
- evolutionary analysis techniques, and
- financial analysis techniques.

Fleisher and Blenkhorn (2000) classified CI analytical tools by using a work list which include strategic, product oriented, environment oriented, customer oriented, financial oriented, technological oriented, and behavioural. The following sections explain the various analytical tools based on the classification by Fleisher and Blenkhorn (2000).

2.9.1 STRATEGIC ANALYTICAL TECHNIQUES
The major tools, according to Fleisher and Blenkhorn (2000), which use strategic concepts, include industry-classification analysis (for example, Porter’s five forces analysis), driving forces or industry-maturity analysis using S-curves depicting lifecycles, core competencies and capabilities, resource analysis (tangible and intangibles), future analysis, key success factors, strategic-group analysis, or competitor-gap analysis. Fleisher and Bensoussan (2003) include Boston Consulting Group growth/share portfolio matrix, General Electric Business Screen Matrix, industry analysis, SWOT analysis, strategic group analysis and value chain analysis, as tools that are
used to gain intelligence about own business and competitors from a strategic point of view.

2.9.2 CUSTOMER ORIENTED ANALYTICAL TECHNIQUES

Fleisher and Blenkhorn (2000) stressed that sustainable competitive advantage is achievable when an organization constantly delivers better customer value than their competitors. Several tools such as customer-value analysis, preferences benchmarking, customer-value mapping, price-performance mapping, and customer-value are used by organizations to assess how they are delivering customer value, relative to their competitors.

2.9.3 PRODUCT ORIENTED ANALYTICAL TOOLS

As competition can now swiftly develop imitations, thereby invariably decreasing the time that a company can sustain its competitive superiority, it is paramount for an intelligence analyst to understand a competitor’s products and services. This form of foreknowledge can be acquired through the use of tools such, as reverse engineering, tear-down analysis, blind testing, and mystery shopping (Fleisher and Blenkhorn, 2000). Fleisher and Bensoussan (2003) mentioned another useful tool called product lifecycle analysis.

According to Evans (2011b) the type of research you apply in CI can be influenced by where you stand within the product life cycle. When new products are under development and not yet marketed, CI will focus on the marketplace. Once the product is introduced and placed into the market, CI will shift more emphasis on the customer. As the product gains market attention, the emphasis shifts to the competition.

2.9.4 ENVIRONMENT-ORIENTED ANALYTICAL TOOLS

Kermally (2004) argues that variables in the business environment affect the manner in which business is conducted and, according to Fleisher and Blenkhorn (2000), an intelligence analyst needs to be aware of how the business environment is impacting on the overall competitiveness of the organization. This understanding is gained through the analyst’s application of tools such as STEEP analysis, scenario analysis, stakeholder analysis
(Fleisher and Bensoussan, 2003). Fleisher and Blenkhorn (2000) pointed out the use of other tools such as country risk, issue mapping, policy analysis, political and social risk, and media-content assessment.

2.9.5 FINANCIAL-ORIENTED ANALYTICAL TOOLS

Effective competitor analysis will be almost incomplete without knowledge of the competitor’s financial state, as very often financial muscle is a key factor in determining the competitiveness of a player in the market place (Fleisher and Blenkhorn, 2000). Financial analysis helps to understand a competitor’s economic and financial character, capabilities, and its potential direction.

Fleisher and Blenkhorn (2000: 85) also submit that the tools which can be used include “ratio analysis, sustainable growth-rate analysis, disaggregated financial-ratio assessment to understand the economic characteristics of a corporate competitor’s business units or product lines, competitive-cost analysis to understand how firms are establishing low-cost positions and value-chain analysis.”

2.9.6 TECHNOLOGICAL-ORIENTED ANALYTICAL TOOLS

Technological advancements are now being used to out-innovate competitors in the market place in both process and product/service lines (Fleisher and Blenkhorn, 2000). Montgomery and Weinberg (1979) noted that the long term survival of a company requires constant monitoring of emerging technologies, taking into account technologies outside one’s own industry.

Fleisher and Bensoussan (2003) identified the use of patent analysis to monitor emerging technologies. According to Miller (2000: 86), governments grant patents to encourage inventors to share the secrets of their invention and this can provide a foundation for prospective inventors. Miller (2000: 86) argue that intelligence can be built by analyzing a stream of patents assigned to a competitor. Fleisher and Bensoussan (2003) pointed out that patent analysis can unearth an organization’s technical competitiveness and, forecast future technological trends and prepare for potential competition based on new technologies.
2.9.7 BEHAVIORAL-ORIENTED ANALYTICAL TOOLS

Evans (2011b) identified that every organization has its own unique culture which can be viewed in a similar way when we psychologically profile a human being. For instance, some organizations are risk takers whilst others are risk averse. “If we can understand this psychological profile at the organizational level, then we have good insights into how we can compete” (Evans, 2011b: 19). The more a company knows about its competitor’s management and key employees, the easier it becomes to predict the likely actions of the competitor (Fleisher and Blenkhorn, 2000). “Study your enemy until you are absolutely certain of his habits. In his habits you will find his weakness” (O’Leary, 2004: 37). Some of the key tools the analyst uses in understanding management style, culture, and values are, shadowing, leadership profiling, and values analysis (Fleisher and Blenkhorn, 2000).

2.10: EMPIRICAL STUDIES ON CI SYSTEMS IN PRACTICE

Priporas et al. (2005) conducted a research on CI activity in Greece. The purpose of the study was to investigate awareness, attitudes and implementation with respect to CI in Greece. The study was conducted using In-depth interviews, with a sample of 50 well-known companies around Thessaloniki, an area of strategic marketing importance in Greece. Priporas et al. (2005) found that the adoption of CI in Greece is well behind the USA, but closely at par with the UK. They attributed the slow adoption to unawareness, lack of sufficiently competent staff and a shortage of experts available to train them, perceptions of the cost, and somewhat complacent satisfaction with the general market research activity of the in-house marketing department.

Priporas et al. (2005: 665) notes that in Greece, the majority of respondents (35; 70 per cent) believed that existing staff did not have the necessary skills or training to set up a CI department. Only 12 executives (24 per cent) knew that such a tool existed. In addition, they found out that only two companies (4 per cent) had an official and organized CI department, a phenomenon which 34 respondents (68 per cent) considered to reflect lack of awareness and eight (16 per cent) thought it resulted from the cost of operating such a
department. The research was founded on significant changes in the competitive economic changes over the years which were experienced in the Greek economy, a similar characteristic experienced in Zimbabwe, particularly after the introduction of multicurrency system in the economy.

Wright et al. (2002) also conducted a survey of 45 UK companies and concluded that CI remains the domain of large scale companies and is seen as needing considerable financial and human resource investment. They also found out that the overriding influence on successful CI activity is the existence of a management style, culture and structure which encourage trust, facilitate communication, and encourage the easy flow of information.

In a similar vein, Groom and David (2001) as quoted by Priporas et al. (2005: 662), surveyed CI practice in 44 small US enterprises and found out that exactly half the sample reported that their companies had no formal process for making the information available in the company, creating a problem in the flow and exchange of information.

Calof (2004) who studied CI systems in small to medium sized business in Canada observed that Canadian companies have a good culture to support CI but are not really practising it. Low scores were evident in Planning/Focus, Analysis, Communication and Systems/Procedures. Medium level scores appeared on Counter-intelligence and generally a very high score in Awareness/Culture.

Kruger (2010) used a questionnaire to conduct a survey on the use of CI in the Long Term Insurance Industry In South Africa and concluded that CI is used formally in larger organizations and shares the same reason with Wright et al. (2002) that smaller organizations lack the human and financial resources to establish a formal CI activity. Kruger (2010) further concludes that small organizations in South African Long Term Insurance Industry, however, do carry out informal CI activities for decision making.
Pelsmacker et al. (2005), on the other hand conducted a comparative study of CI practice between South Africa and Belgian companies and concluded that both countries are not well equipped with and not active to conduct effective CI, especially in the areas of planning, process and structure, data collection, data analysis, and skills development. This observation is also consistent with the results from a research by Heppes and Dutoit (2009), who concluded that there appears to be a lack of, and great requirement for, the provision of analytical products in CI activities for retail banks in South Africa. No study has been carried out in Zimbabwe.

CI systems are not organized in a separate department, and if they are, are mostly done in the marketing and sales department. Strauss and Dutoit (2010), in their research to assess the CI skills in South Africa, also concluded that there is a gap between what respondents view as important skills and their competency levels concerning those identified skills. The same findings were shared by Viviers et al. (2005) who confirmed that South Africa lacks in depth and extent of education in CI activities.

The study by Pelsmacker et al. (2005) contributed significantly on choosing the population for this study. In this comparative study of CI practice between South Africa and Belgium only construction companies were involved in the study. The same was adopted for this study, where, only one construction company was chosen as a case study for the construction industry of Zimbabwe.

Nasri (2011) conducted a survey to investigate the degree of knowledge of competitive intelligence in Tunisian companies. The study was conducted using semi-in-depth interviews and a focus group with six executives in six companies in Tunisia. Tunisia shares same characteristics with Zimbabwe, such as opening the economy to international competition through membership of trading blocs. The study by Nasri (2011) was premised on the changing competitive landscape of Tunisia. It came out that most companies knew what CI was but never fully utilized its benefits (Nasri, 2011).
According to a global research conducted by Global Intelligence Agency (2005: 9), the prominent information needs for decision makers is information on competitors, own industry, and customers, and these requirements combined represented 78 percent of information needs. Other information needs such as macro environmental trends, technologies, customer industries, similar industries and countries, contributed 22 percent of the global information needs. Drilling down into the global research, it is interesting to note that different countries have varying information needs priorities.

While the companies in Brazil, Germany, Norway, and Switzerland considered “information about competitors” the most important of their information needs, in Mexico and Asia-Pacific, the most important was “customer information”. The general conclusion by Global Intelligence Agency (2005:10) was that, information on competitors, own industry and customers, has the strongest impact on business success. However, the shortcoming on the research is that it did not explain the variation in priorities based on different countries.

There are no studies conducted about CI systems in the local construction industry and in general, on all sectors of the economy. The absence of secondary information on CI activities in Zimbabwe provided an opportunity for this study to attempt to close the information gap in literature.

2.11: CHAPTER SUMMARY

The main objective of this chapter was to justify the development of research questions highlighted in Chapter 1. This chapter discussed in terms of literature, how to plan and focus intelligence needs, how and where to collect data and technologies which can be used in this era of information overload, and how to turn information into actionable intelligence and the various analytical tools available. The chapter also set out what literature regards as the appropriate structures and culture necessary for CI activities. In this chapter, the researcher highlighted empirical researches conducted
elsewhere as these will directly or indirectly shape the research design and methodology to be used in this study. Whilst studies on CI have been conducted in various countries, no studies have been conducted in Zimbabwe, thereby creating an information gap that this study attempts to close. The next chapter will focus on the research methodology as the researcher articulates on the research modus operandi in terms of the designs, instruments and approaches, which are necessary to get answers to the research question developed in Chapter 1.
CHAPTER 3: RESEARCH METHODOLOGY

3.0 INTRODUCTION
This chapter describes the actual procedure followed in collecting and collating data to be used in the compilation of this research. The chapter critically looks at the research methodology and the corresponding justification of the methodology adopted. This study adopted both the qualitative and quantitative research approaches. The researcher randomly selected the research subjects and administered a structured questionnaire to Focus Construction’s key management and staff as a data-collecting tool.

The chapter comprises the population, sample size and technique of data collection, data quality management, analytical data model, secondary data sources, research limitations, data analysis and presentations, and it ends with a chapter summary.

3.1 RESEARCH PHILOSOPHY
According to Saunders and Lewis (2008), there are different views about the way in which knowledge is developed. The two major philosophical schools of thought that have dominated literature on the research process are positivism and phenomenology. Fisher (2004), Collis and Hussey (2003) postulate that the research philosophy is a reflection of people’s basic beliefs and assumptions about the world and the nature of knowledge and how it influences a researcher’s research design, data collection and analysis.

In order to make a decision as to which approach to adopt in a research, it is however imperative that the researcher understands the distinguishing features between positivism and phenomenology.

3.1.1 POSITIVISM APPROACH
Welman and Kruger (1999) pointed out that positivism is a research philosophy based on the scientific approach to research in that it is limited to what can be observed and measured objectively and exists independently of
the feelings and opinions of individuals. This is well collaborated by Remenyi (1998) and Saunders et al. (2000) who noted that such a research would result in generalizations and utilizes a highly structured methodology to facilitate replication and focuses on quantifiable observations that can be statistically analyzed and tested.

The positivist approach has been criticized for failing to recognize that it is impossible to separate people from their social contexts and that they cannot be understood without the perceptions they have about their own world, (Collis and Hussey, 2003). By using a highly structured research design, more relevant and interesting findings may be ignored and moreover capturing complex phenomena in a single measure may be misleading (Collis and Hussey, 2003). Notwithstanding the above criticism on the positivist approach, the researcher used this design in this study as it was deemed appropriate due to the nature of data that needed to be collected.

3.1.2 PHENOMENOLOGICAL APPROACH
The phenomenological approach takes a qualitative perspective to the research process. The phenomenology philosophy is a critique to positivism as it sees reality as subjective and also tries to obtain rich insights into the complex business world, insights which are usually lost if such complexity is reduced to mere generalizations or a single measure (Saunders et al., 2008; Collis and Hussey, 2003).

Saunders et al., (2008) pointed out that the phenomenological approach is the most appropriate to complex business and management issues which cannot be easily reduced to definite laws in the same way as physical sciences. Generalizing is not vital because of the ever-changing nature of the business environment where there are complexities in circumstances and individuals. Further, Saunders et al. (2008) expressed that phenomenology aims to unveil the details of the situation, and to understand the reality.
In choosing which method to use, the researcher was guided by Easterby-Smith et al. (1991) who suggested that the approach one takes is important for three main reasons; namely:

- It enables one to make a more informed decision about the research design, that is, the methods by which data is collected and analyzed.
- It helps one to think about those research approaches that work and those that do not;
- Knowledge of the different research traditions enables one to adapt a research design that caters for constraints.

For the purposes of this study, the researcher chose also to use the phenomenological approach to establish if the reality on the ground could confirm the theories and assumptions of the study. In addition, given the nature of the study as outlined in Chapter 1, the phenomenological and positivist approaches were the most appropriate because the data being sought from research participants is of both quantitative and qualitative in nature. Thus the methodology adopted in this study was triangulation of the qualitative and quantitative research approaches.

### 3.2 RESEARCH STRATEGIES/METHODS

According to Saunders and Lewis (2008), there are more than eight main types of research strategies which can be used, and these are as follows:

- Cross sectional
- Experimental
- Longitudinal
- Action research
- Case studies
- Grounded theory
• Participative inquiry

3.2.1 CASE STUDY
Robson (1993) defines case study as the development of detailed, intensive knowledge about a single case or small number of related cases. He further argues that the case-study approach also has a considerable chance to generate answers to questions: why? what? and how? and is used to carry out an in-depth study of the situation. According to Saunders, Lewis and Thornhill (2003), this strategy enriches the understanding of the context of research and the processes being enacted. Robson (2002) adds that a case study allows several data collection methods to be used such as questionnaires, interviews, observations and documentary analysis. This study adopted a case study research strategy because the study wanted to give management at Focus Construction solutions to their problems.

3.2.2 ACTION RESEARCH
Action research is a process by which change and understanding can be pursued at the same time. It is usually described as cyclic, with action and critical reflection taking place in turn. The reflection is used to review the previous action and plan the next one. As Dick (1997:7) describes it, “Action research consists of a family of research methodologies which pursue action and research outcomes at the same time”. This strategy was not used in study because of the nature of the research.

3.2.3 SURVEY
A survey refers to a method of data collection that utilizes mostly questionnaires and assists in getting opinions, attitudes and descriptions as well as understanding cause and effect relationships (Ghauri and Gronhaug, 2000). According to Swetnam (2000), surveys attempt to gather information from an entire group, or more usually a sample, which can then be used to make inferences. The information may be gathered in several ways, such as interviews, questionnaires or structured lists of inquiries. Surveys can be purely descriptive or explanatory. This strategy was not used in study because of the nature of the research.
3.2.4 EXPERIMENT

In an experimental research strategy, the effects of manipulating one variable on another variable are measured. Typical features include selection of individuals from known populations; allocation of samples to different experimental conditions; introduction of planned change on one or more variables; measurement on a small number of variables; control of other variables (Colin Robson, 1993). This strategy usually involves hypothesis testing. However, it is not applicable in this research because of its nature; several variables are going to be measured at the same time through the use of questionnaires.

3.2.5 GROUNDED THEORY

Grounded theory building is a process by which one collects and analyzes data by considering only those variables and hypotheses that emerge from the data and formulates a concept or proposition from the emergent relationships. This strategy is not structured whereas the research problem in this case is structured, well understood and requires a structured approach hence this strategy is not applicable to the study.

3.2.6 ETHNOLOGY

Ethnology is the branch of anthropology that compares and analyzes the origins, distribution, technology, religion, language, and social structure of the racial or national divisions of humanity. Ethnology takes a compiled research and then compares and contrasts different cultures.

This study did not follow the ethnological strategy. This is so because of the reasons of objectivity since the research topic does not dwell on the backgrounds of concepts and issues at the organization.

3.3 TIME HORIZONS

3.3.1 CROSS SECTIONAL AND LONGITUDINAL

For this study, selecting the appropriate time horizon was the choice between two primary alternatives: between a cross-sectional or longitudinal study. Given the research problem as outlined in Chapter 1, the best fit was to
follow the **snap shot cross-sectional** type of the case study. Denzin and Yvonna (2005) argue that in a snap shot cross-sectional case study, data are gathered from many participants at a single point in time or during a single, relatively brief period of time. The major advantage of snap shot cross-sectional case study is that data can be collected from many respondents in a relatively short and less costly period of time.

### 3.4 POPULATION

Kaseke (2009) citing Saunders et. al (2007) defined a study population as the entire set of units for which the study data are to be used to make inferences. A research population is a well-defined collection of individuals or objects known to have similar characteristics (Yin, 2003).

Canhao and Keogh (2000) defined a population as the entire group of objects of a particular type under study. Thus, this implies the entire assemblage of organisms, units or characteristics of interest to the investigator. The population under study must be clearly and fully defined stating what is included and excluded. According to Saunders et al (2003), a population is a full set of cases from which the sample is taken. Wegner (2002) defines a population as all the possible observations of the random variable under study.

In this study, the target population was composed of all the employees and management of Focus Construction from all the functional departments’ i.e. production, administration and marketing covering all the staff levels, that is, senior management, middle management, first line/ supervisory, administrative and junior/plant staff.

### 3.4.1 SAMPLE AND SAMPLING TECHNIQUE

#### 3.4.1.1. SAMPLE SIZE

Wegner (2001) defined a sample as a subset of a population. Populations are studied using samples from a population, as it is not always feasible to gather information on all members of a population. A representative sample is one,
which has been selected in such a way that, as far as possible, the main characteristics of the sample match those of the parent population (Saunders, et al., 2003). Wegner (2001) stated that it is too costly and time consuming to conduct a census of the population if the population is too large hence the need resort to sampling, which is generally cheap to conduct and less time consuming. Francis (1998) notes though that a general disadvantage of sampling is the natural resistance by the layman in accepting the results as representative of a given population. Other disadvantages depend on the method of sampling used.

Using Focus Construction as a case study, the size of the sample was governed by the factors stated below:

The number of permanent employees at Focus Construction is 60, a number that is too small to be representative of the population of the construction industry. However, the study results could still be applicable to other players in the construction industry.

The study constituted a sample size of thirty-five respondents. Saunders (2007) asserts that a sample should have at least 30 respondents for it to be representative enough and so that results can be safely inferred to the general population. The sample consisted of a mixture of managers and their subordinates to give the sample some objectivity. The assumption was that all participants could understand the use of CI systems.

It is against this background that the researcher chose the sample. The sample break down was as per the table below:

**Table 3.1: Target Population**

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director(s) and Executive(s)</td>
<td>1</td>
</tr>
<tr>
<td>Senior managers</td>
<td>3</td>
</tr>
<tr>
<td>Middle managers</td>
<td>6</td>
</tr>
<tr>
<td>First-line managers / supervisory level</td>
<td>10</td>
</tr>
</tbody>
</table>
Saunders et al., (1997) posit that the response rate of elements or subjects is quite critical when establishing the sample size and one has to estimate the response rate first. Saunders et al. (1997) further admit that estimating the response rate from the sample to which you are sending a questionnaire is difficult. They provide one way of establishing the response rate is through the review of previous surveys. Saunders et al. (1997) citing a research by Dillman (1978) give a benchmark for response rate of questionnaire at between 50 percent and 92 percent.

The researcher chose the respondents in such a way that an equitable representation would ensure accuracy in terms of result inferences to the whole population.

3.4.1.2 SAMPLING TECHNIQUES

There are two main groupings of sampling techniques, that is, probabilistic and non-probabilistic techniques. Probabilistic sampling is mostly associated with survey-based research, while non-probabilistic sampling is usually associated with, among others, the case study research. Probabilistic sampling techniques include simple random sampling, systematic random sampling, stratified random sampling and cluster sampling. Non-probabilistic sampling includes quota sampling, purposive sampling, and convenience sampling (Saunders et al., 2003).

The sampling technique used in this study was that of non-probability sampling. The sampling technique was non-probabilistic hence judgmental sampling was employed.

3.4.1.2.3 PROBABILITY (RANDOM) SAMPLING

Wegner (1993) argues that probability sampling includes all selection methods where the observations to be included in a sample have been
selected on a purely random (chance) basis from the population. It is only through the random selection of sampling units from the population to be included in a sample that sampling errors can be measured and, be able to establish the representative nature of the sample drawn. Summarized below are the non-random selection methods:

3.4.1.2.4 NON-PROBABILITY (NON-RANDOM) SAMPLING METHODS

In non-random sampling, the assessment of reliability is not possible, regardless of how careful the researcher is in selecting elements of the sample (Luck and Rubin, 1987). Leedy (1992) contends that there is no guarantee that the samples represent the population being studied. As such, non-random sampling techniques were used given the size of the population as well as the subject under research. Table 3.2 below shows a summary of non-probabilistic sampling techniques:

Table 3.1: Non-probabilistic Sampling Techniques

<table>
<thead>
<tr>
<th>Non-Probability Sampling Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Convenience Sampling</strong></td>
</tr>
<tr>
<td><strong>Judgment sampling</strong></td>
</tr>
<tr>
<td><strong>Quota Sampling</strong></td>
</tr>
<tr>
<td><strong>Snowball sampling</strong></td>
</tr>
</tbody>
</table>

The sample under study was got over a period of seven days where a list of the employees and their grades were broken down in a bid to come up with the most appropriate respondents for the survey. The population was first put into subgroups and then units were selected based on the researcher’s judgment from each stratum. This is to say that, the prospective population
were put into different subgroups on the basis of their grades, and the respondents were judgmentally selected from each of the stratum of grades to make up the sample, hence the breakdown as seen in table 3.1 with the frequencies per stratum. This was in a bid to get a representative sample from the junior staff to senior management. These were the staff that had a likely knowledge of CI.

Focus Construction classifies its employees into the various grades. A judgmentally based sample of 35 respondents was then picked out of the total population of 60. The reason why some junior staff were chosen was that they were seen to have an understanding of Focus Construction’s CI systems and hence would be in a position to give information that is more objective.

The benefits of using this technique are that it focuses on participants who are likely to give relevant data and ignores the irrelevant ones that may not have any knowledge about the subject at hand. Judgmental sampling improves accuracy of estimation.

The judgmental sampling technique adopted in the study ensures that all departments of Focus Construction are represented in the study results, hence the usefulness and validity of the research findings is enhanced. Senior management have different needs and expectations to those of the junior managers. Senior management expect to see that CI systems of the company fully integrate or are in synergy with the overall company strategy. The junior management team would look more at the implementation side of CI systems. This can be confirmed through the way issues were being articulated in the questionnaires. There is a difference in perspective of the senior managers’ views of the company’s CI systems to the junior manager’s views.

3.5 DATA COLLECTION

Data were obtained from mainly primary data sources using a self-administered questionnaire method. In addition, some secondary information was got from the company monthly records on key performance indicators of marketing and monthly company financial reports.
Since the study was qualitative, the questionnaire was used as a data collection instrument because of its applicability to this research design. The major advantage of using the questionnaire was that it could be administered to large numbers of people at the same time. Moreover, this method proved to be cost effective and convenient in collecting data. The data collection process was done in such a way that all 35 respondents were given questionnaires to fill on their own. All of the questionnaires were hand delivered to respondents and collected later. The collection period proved to be a very challenging task for the researcher as some respondents were not prepared to answer on time and 3 respondents did not even find time to respond at all.

The self-administered research questionnaire has its benefits in that it is cost and time effective. A research questionnaire allows respondents to remain anonymous. Finally, the study also used secondary data that was extracted from monthly and annual management reports that helped in examining past trends and linking it into the future.

Secondary data was also extracted from the company’s monthly and yearly financial reports (Fraenkel and Wallen, 1996). The use of a combination of primary and secondary data collection techniques is advantageous in that they complement each other, thereby reducing the chance of bias and gives a more comprehensive understanding of the topic under study.

3.5.1 PILOT STUDY

A pilot study was conducted on 10 respondents to see if the respondents would be comfortable filling in the questionnaire by themselves and to see if the questions were clear and easy to respond to.

This was a way of ensuring that the questions on the questionnaire were not ambiguous but simple and straightforward to enable the rest of the respondents to answer the questions without assistance because of the clarity therein. The pilot test results were to refine the questionnaire. Items on a questionnaire were grouped into logically coherent sections. During the data
processing stage there were also some precautionary measures taken such as double entry of results at data capture stage to ensure accuracy.

3.5 RESEARCH LIMITATIONS
The researcher faced a few issues in the research process, such as getting the respondents to timeously complete the questionnaire. However, the study sample was made to be more representative in order to counter the sampling problem caused by lack of financial and time resources.

The above limitations were overcome by the data collection instrument and the technique used of self-administered questionnaires. These eliminated the problem of lack of financial capacity to carry out the research.

3.7 DATA PRESENTATION AND ANALYSIS
Data collected from the research was extracted from the study material using the Statistical Package for Social Science (SPSS version 19), a windows software program to produce frequencies. Descriptive statistical methods of data analysis such as pie charts, bar graphs and simple data tables, were used to explore and understand the data extracted from the research. Microsoft Excel was used for the purposes of data presentation.

Hussey & Hussey, (1997); Leedy and Ormrod, (2001); Miles and Huberman, (1994); Patton, (2002) and Yin, (1994) have expressed their opinion on how best to present and analyze qualitative data gathered as part of a phenomenological research project. Leedy and Ormrod (2001), provided guidance in the area of data analysis in a case study, which they stated, typically involves the following steps:

- Organization of details about the case. The facts are arranged in a logical order.
- Categorization of data. Categories are identified that can help classify data into meaningful groups.
- Interpretation of single instances. Specific documents, occurrences, and other bits of data are examined for the specific meanings that they might have in relation to the case.
• Identification of patterns. The data and their interpretations are scrutinized for underlying themes and other patterns.
• Synthesis and generalizations. An overall portrait of the cases. Conclusions are drawn that may have implications beyond the specific case that has been studied,” (Leedy and Ormrod, 2001:150).

This approach was adopted in discussing the analysis methods used in the research project. To prepare for data entry, questionnaires were given unique codes for all responses from respondents and a data entry template was designed in Excel. The data was entered using the same package. After entry, the data was cleaned to remove inconsistent responses by running frequency tables in the Statistical Package for Social Sciences (SPSS) version 19. The data was then analyzed using SPSS version 19. In data analysis and interpretation, the researcher used descriptive statistical tools like frequencies, percentages, mean, item analysis and cross-tabulation tables and figures. In order to deduce and fully understand the findings meaningfully, data were compared and contrasted to what was published by other scholars (that is, extant literature).

3.8 CHAPTER SUMMARY

This chapter has explained the various options available for the execution of the field research and the logic for the selection of the specific approach, strategy and methods applied in this research.

In summary, the overall methodology is one based on a triangulation of both the phenomenological and positivistic philosophies. It combines non-empirical and empirical approaches; is subjective rather than objective (having a high involvement by the researcher); uses mainly qualitative methods; employs the case study as the primary research strategy; takes a snapshot approach to the case setting; seeks to treat the case as one of an exploratory nature, and uses probability (stratified) sampling technique, a combination of data sources (both primary and secondary) and utilized purely descriptive statistical analysis tools.
The following chapter presents the empirical case data gathered during the fieldwork phase of this research.
CHAPTER 4: DATA PROCESSING, PRESENTATION AND DISCUSSION

4.0 DATA PROCESSING, PRESENTATION AND DISCUSSION

4.1 INTRODUCTION

This chapter is fully dedicated to the presentation of results found in the case study discussed in the previous chapter. When conducting any research work, a high response rate is highly desirable. In this respect, the chapter begins with a brief discussion of the data collection method used and the response rate.

The presentation of results was done under the following titles: to establish whether Focus Construction’s strategy, culture and structure would support the adoption of CI systems; to ascertain the particular activities in the CI system; to determine Focus Construction’s source and methods of collecting intelligence; to establish the competitive analytical tools used to convert information into actionable intelligence in the local construction industry and to determine the key drivers which make competitive intelligence systems a source of sustainable competitive advantage. The analysis was done by entering data into SPSS version 19 for Windows package.

The research findings were presented in the order in which the questions were asked in the questionnaire. The research proposition was tested in this chapter against each research objective. The chapter ends with a summary and conclusions.

4.2 PRESENTATION OF RESULTS

This section seeks to present the results obtained by the current study. To do so, the researcher will follow the outline given in Section 4.1 above. The researcher used both descriptive statistics (frequency analysis) and qualitative analysis tools (content analysis, cross-tabulations, tables, frequencies, bar graphs and pie charts) to add more value to the research findings in some of the questions because some questions could only elicit partial explanations in
terms of revealing and linking the various relationships between different variables under the study.

4.3 RESPONSE RATE

4.3.1: ANALYSIS AND FINDINGS

Table 4.1 below shows the response rate for the participants in this study.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Questionnaires sent out</th>
<th>Questionnaires completed and returned</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>28</td>
<td>80%</td>
</tr>
</tbody>
</table>

RESULTS

A total number of 35 questionnaires were sent out and 28 questionnaires were returned, giving 80% response rate. One questionnaire targeted the director, 3 for the senior managers, 6 for middle managers, 10 for first line managers/supervisors and 15 were sent out to junior staff. Of the 35 questionnaires returned, one questionnaire was collected from the director, 3 from senior managers, 6 middle managers returned their questionnaires, while 10 questionnaires were returned by supervisors and 8 questionnaires were successfully collected from the junior staff.

DISCUSSION

The above findings reveal that respondents were eager and interested in the research that was being carried out. A high response rate of above 50% is big enough to justify the generalizability of case study findings as propounded by Liebow (1995). An 80% response rate is also big enough to warrant the validity and reliability of the research findings. This is in line with what Saunders et al. (2007) who contend that, for hand delivered and collected questionnaires, a moderately high response rate of 30-50% is guaranteed. A sample size of 35 which was drawn from a total population of 60 employees, justifies the sample size because it is above 10% of the total population. This
satisfies the sample size requirements as stated by Saunders et al. (2007). Thus, for this research, an overall response rate of 80% is representative enough of the population and to achieve the research objectives.

4.4: BACKGROUND INFORMATION

4.4.1: ANALYSIS AND FINDINGS

Figure 4.1 below shows categories of workers at Focus Construction.

![Figure 4.1: Categories of workers at Focus Construction.](image)

RESULTS

Results indicate that the majority of research participants were junior staff (40%), supervisors constituted of 35%, administrative staff (15%) while senior management and middle management constituted 5% each.

DISCUSSION

Research findings reveal that the majority of the participants were junior staff. The high response rate as well as the actual responses from junior staff reveal that they were interested in the study and showed that they are knowledgeable about CI systems. All other categories of workers at Focus Construction were represented as illustrated in Figure 4.1 above. This implies that all levels of the workers in the construction industry were represented in
this study, thus the employee perceptions in this research study can be overall accepted and generalizations can be made for almost all companies in the construction industry.

4.4.2: Figure 4.2 below shows years of service for workers at Focus Construction.

![Bar chart showing years of service for workers at Focus Construction.](image)

Figure 4.2: Period of employment at Focus Construction.

**RESULTS**

Results indicate that the majority of workers at Focus Construction have served 1-5 years (45%), 20% have served 6-10 years, while another 20% served for less than one year and 15% have served at least 10 years in the organization.

**DISCUSSION**

The above statistics reveal the nature of employment practices in the construction industry where fixed-time workers form the majority of the workforce. Workers with more than 6 years of service could be administrative staff who have indefinite employment contracts while those with less than a year could be fixed-time workers working on specific projects. The diversity of length of service brings value to the research with regard to their past experience which has a strong bearing on deciding whether to adopt CI not in the organization.
4.4.3: Figure 4.3 below shows respondents’ highest level of education.

Figure 4.3: Respondents’ highest level of education.

RESULTS

Figure 4.3 shows that the majority of staff at Focus Construction are certificate holders (35%); 25% are diploma holders; 5%, undergraduates; 5%, masters; while 5% of staff have other qualifications.

DISCUSSION

The above research findings indicate that despite the nature of construction industry, Focus Construction has educated and literate staff. The diversity of staff qualifications provides more value to the study. The fact that the respondents consist of employees who have different qualifications brings interesting views to the research.
4.4.4: Figure 4.4 below shows the distribution of staff according to departments at Focus Construction.

Figure 4.4: Distribution of staff according to departments at Focus Construction.

RESULTS

Figure 4.4 above indicates that the majority of staff at Focus Construction is in the production department (60%), 35% in the administration and 5% in the marketing department.

DISCUSSION

The above findings reveal that the construction industry is labour intensive hence the large numbers in the production department. Results also indicate that the marketing and administration departments though they have less staff, they have more educated staff compared to the production department. However, such differences bring interesting opinions in the study on the applicability of CI systems at Focus Construction.

4.5: TO ESTABLISH WHETHER FOCUS CONSTRUCTION’S STRATEGY, CULTURE AND STRUCTURE WOULD SUPPORT THE ADOPTION OF CI SYSTEMS.

4.5.1: Figure 4.5 below shows respondents’ knowledge about the company’s strategic direction.
Figure 4.5: Respondents’ knowledge about the company’s strategic direction.

RESULTS

Figure 4.5 above shows that the majority of respondents (95%) knew the strategic direction for Focus Construction. However, 3% did not know and 2% were not sure.

DISCUSSION

The above findings reveal that almost all staff at Focus Construction know where their organization is heading. This is line with Grant (2005) who contends that employees should know what their organization is striving to achieve and for most organizations, the most fundamental objective is to achieve best performance. Management at Focus Construction is encouraged to display their vision, mission, goals and values so that all staff can know where their organization is going.

4.5.2: Figure 4.6 below shows respondents’ knowledge on the term organizational culture.
Figure 4.6: Whether respondents have access to the current strategy at Focus Construction.

RESULTS

Figure 4.6 shows that the majority of the participants have access to the current strategy at Focus Construction (85%), while 10% indicated that they did not have and 5% were not sure.

DISCUSSIONS

The above results reveal that the majority (85%) of respondents have access to the current strategy at Focus Construction. These findings are in line with Thompson and Strickland (2009), who contend that all employees should know and have access to their companies’ strategies. It shows that management at Focus Construction cascades the strategy of the company to the last shopfloor employee and all employees should access to the strategic document.

4.5.3: Figure 4.7 below shows the respondents’ views on their understanding of the term organizational culture.
Figure 4.7: Respondents’ knowledge on the term organizational culture.

RESULTS

Figure 4.7 above shows that the majority of respondents (78%) agreed that they knew what the term organizational culture means, 28% showed ignorance, while 4% were not sure.

DISCUSSION

The above findings reveal that management at Focus Construction moulded a certain culture in their organization. These findings are in line with Kotter and James (2002) who stated that an organization should have a culture that it identifies itself with. It means that management at Focus Construction inculcate a desirable culture that assists it in the attainment of its strategic goals.
4.5.2: Figure 4.8 below shows respondents’ description of organization culture at Focus Construction.

Figure 4.8: Respondents’ description of organizational culture at Focus Construction.

RESULTS

Figure 4.8 above shows that 85% of the respondents described the culture at Focus Construction as high performing, 10% described it as low performing while 5% were not too sure.

DISCUSSION

This was a follow up question to question 4.5.3. Research findings reveal that respondents who understood the term organizational culture could also describe it. Dubith (2007) posits that organizational culture cannot be described as good or bad, right or wrong. Rather, it should be judged on whether it is suited or not to the organization’s strategic intentions. Thompson et al. (2009) argue that organizational culture can be classified, either as high performing or as low performing. Thus, the above findings are in support of Thompson et al. (2009).
4.5.3: Figure 4.9 below shows organizational structure at Focus Construction.

Figure 4.9: Description of organizational structure at Focus Construction.

RESULTS

Figure 4.9 above indicates that the majority of participants (70%) described the organizational structure at Focus Construction as a flat structure, 15% described it as a matrix structure, 10% as a tall structure, while 5% were not sure of the organizational structure at Focus Construction.

DISCUSSION

Most of the respondents (70%) indicated that a flat organizational structure exists at Focus Construction. Robson (2006) posits that CI systems are easily implemented in organizations that have a flat structure than a tall structure. Thus, in line with this observation, management at Focus Construction have maintained a flat organizational structure which is conducive to adopt the CI systems.
4.5.4: Figure 4.10 below shows whether there is a fit between strategy, culture and structure at Focus Construction.

Figure 4.10: Whether there is a fit between strategy, culture and structure at Focus Construction.

RESULTS

Figure 4.10 above shows that 68% of respondents contend that there is a fit between strategy, culture and structure at Focus Construction. Twenty-two percent disagreed and 10% were not quite sure.

DISCUSSION

The above findings reveal that a fit between strategy, culture and structure exists at Focus Construction. These findings are in support of Thurow (2009) and Green (2009) who stated that strategy, culture and structure should be aligned if CI systems are to be implemented in any organization. Thus, management at Focus Construction should maintain the fit between strategy, culture and structure in their organization.

4.5.5: Figure 4.11 below shows respondents’ opinions on whether the strategy, culture and structure at Focus Construction would support the adoption of Competitive Intelligence.
Figure 4.11: Whether the strategy, culture and structure at Focus Construction would support the adoption of Competitive Intelligence.

RESULTS

Figure 4.11 above shows that 70% of the respondents agreed that the strategy, culture and structure at Focus Construction would support the adoption of CI systems, 25% disagreed while 5% were not sure.

DISCUSSION

Research findings shown above support the works of Deal and Kennedy (2002) who argue that if strategy, culture and structure are aligned, CI systems are easy to implement in such organizations. Thus, management at Focus Construction have been able to adopt the CI systems because there is a fit between their the strategy, culture and structure.
4.5.6: Figure 4.12 below shows whether management conducts regular meetings to gather market intelligence.

Figure 4.12: Whether management conducts regular meetings to gather market intelligence.

RESULTS

Figure 4.12 above indicates that 83% of the respondents agreed that management conducts regular meetings to gather market intelligence while 13% disagreed and 4% were not sure.

DISCUSSION

The above research findings are in line with Smith (2005), who argues that management should conduct regular meetings where intelligence needs for decision-making or strategic planning are made known to a department responsible for gathering market intelligence.

4.5.7: OPEN-ENDED QUESTION

Question 3.9 sought respondents’ opinions concerning the strategy, culture and structure at Focus Construction. Content analysis from free responses revealed that the majority of responses recommended that Focus Construction should maintain the fit between strategy, culture and structure or even improve it. Respondents also recommended that Focus Construction
should adopt CI systems if they are to garner sustained competitive advantage. These research findings are in support of Thompson et al. (2009), Sather (2009) and Green (2008) who contend that it is easy to implement CI systems in an organization that has a high performing culture and that has a fit between its strategy, culture and structure.

4.6: TO ASCERTAIN THE PARTICULAR ACTIVITIES IN THE CI SYSTEM

4.6.1: Figure 4.13 below shows whether planning and focus is a pre-requisite stage in discovering intelligence needs.

![Figure 4.13: Whether planning and focus is a pre-requisite stage in discovering intelligence needs.](image)

Figure 4.13: Whether planning and focus is a pre-requisite stage in discovering intelligence needs.

RESULTS

Figure 4.13 above indicates that 50% of the respondents agreed that planning and focus is a pre-requisite stage in discovering intelligence needs, while 30% disagreed, 10% were neutral and 10% did not know the answer.

DISCUSSION

The above findings reveal that half of the respondents understood that planning and focus is a pre-requisite stage in discovering intelligence needs. This is in line with Sawka (1996) who stated that planning and focus is a pre-requisite stage. Benhardt (1994), Bose (2008:15) and Evans (2011b) further
explained that planning and focus involves working with decision makers to discover their intelligence needs and then translating those needs into their specific intelligence requirements. However, the fact that the other 50% disagreed or were neutral or did not understand could be attributable to the labour intensive nature of the industry whose lower level employees are not actively engaged in the administrative issues of the organization.

4.6.2: Figure 4.14 below shows respondents’ views on whether organizational needs should be translated into key intelligence topics.

Figure 4.14: Whether needs should be translated into key intelligence topics.

RESULTS

Figure 4.14 above indicates that the majority (58%) of the participants agreed that needs should be translated into key intelligence topics, 22% were neutral while 20% disagreed.

DISCUSSION

Research findings imply that the majority of staff at Focus Construction understand that organizational needs should be translated into key intelligence topics. This is in accord with Benhardt (1994), Bose (2008:15) and Evans (2011b) who argued that decision makers should translate needs into their specific requirements or key intelligence topics.
4.6.3: Figure 4.15 below shows whether collection of information should involve gathering the right data legally and ethically.

![Bar chart](image.png)

Figure 4.15: Whether collection of information should involve gathering the right data legally and ethically.

RESULTS

Figure 4.15 indicates that, to a greater extent (90%) of the respondents agreed that CI information should involve gathering the right data legally and ethically. However, 5% disagreed while 1% was not sure.

DISCUSSION

Research findings obtained by this study are in concurrence with Bose (2008:513) and Murphy (2005:45), who state that collection of information includes identifying all potential sources of information, researching and gathering the right data legally and ethically from all available sources. Thus, management at Focus Construction are encouraged to uphold such standards if they are to adopt CI systems in their organization.
4.6.4: ANALYSIS AND FINDINGS

Figure 4.16 below shows whether collected CI information should be tested for reliability and credibility.

![Bar chart showing percentages of responses to the question of whether collected CI information should be tested for reliability and credibility.]

Figure 4.16: Whether collected CI information should be tested for reliability and credibility.

RESULTS

Research findings shown in Figure 4.16 above indicate that the majority (88%) of the participants agreed that collected CI information should be tested for reliability and credibility, 7% were of a different opinion while 5% were neutral.

DISCUSSION

The above research findings are in support of Montgomery and Weinberg, (1979: 49); Saayman et al. (2008: 385); Strauss and Du Toit (2010: 308); McGonagle and Vella, 2002: 25 and Fleisher and Blenkhorn, (2000: 86) who suggest that methods for assessing validity of intelligence source include comparison with other data which may be available from other sources, searching for associated indicators, and face validity. This is a pointer to management at Focus Construction to test gathered CI information for reliability and credibility.
4.6.5: Figure 4.17 below shows whether analysis stage is the cornerstone for CI activities.

![Bar chart showing analysis stage as cornerstone for CI activities](image)

Figure 4.17: Whether analysis stage is the cornerstone for CI activities.

**RESULTS**

Figure 4.17 above reveals that 80% of the respondents agreed that analysis stage is the cornerstone for CI activities. However, 15% disagreed, while 5% were neutral.

**DISCUSSION**

Current research findings depicted in Figure 4.17 above concur with Herring (1998) as quoted by Fleisher and Blenkhorn (2000: 78), who state that analysis answers the question “so what” and is the cornerstone, otherwise, one may end up with information overload but with intelligence deficiencies.
4.6.6: Figure 4.18 below shows whether effective communication is important in analysing CI information.

Figure 4.18: Whether effective communication is important in analysing CI information.

RESULTS

Figure 4.18 above shows that 77% of the respondents agreed that effective communication is important in analysing CI information. Fifteen percent disagreed, while just 5% registered neutral and unknown (3%).

DISCUSSION

Research evidence as illustrated by Figure 4.18 above reveals that effective communication is important in analysing CI information. These results are in line with Prescott and Miller (2001: 7) who argue that effective communication dominates analysis; unless the message from the analysis is communicated effectively, trust and credibility with intelligence users will not be enhanced. This points to the need for effective communication to get trust and credibility in the results of the analysis of CI.
4.6.7: Figure 4.19 below shows whether CI information require timely dissemination to decision makers.

Figure 4.19: Whether CI information require timely dissemination to decision makers.

RESULTS

Figure 4.19 above indicates that the majority of respondents (73%) agreed that CI information requires timeous dissemination to decision makers. Twenty percent had different views, while 7% could not give a specific response.

DISCUSSION

In order for CI information to add value to the organization, it needs to be distributed timeous to decision makers. The above findings are in concurrence with McGonagle and Vella, (2003:9) and Bose, (2008: 512), who argued that, there is need to ensure timely dissemination of intelligence to decision makers.
4.6.8: Figure 4.20 below shows respondents’ opinions on whether CI requires appropriate policies, procedures and a formal or informal infrastructure.

Figure 4.20: Whether CI requires appropriate policies, procedures and a formal or informal infrastructure.

RESULTS

Current research findings as depicted by Figure 4.20 above show that 80% of the respondents were in agreement with the fact that CI requires appropriate policies, procedures and a formal or informal infrastructure. However, 15% disagreed with the statement and 5% were neutral.

DISCUSSION

The above research findings reveal that the majority of respondents (80%) understand by way of their actual responses that CI requires appropriate policies, procedures and a formal or informal infrastructure. These results are in accord with Saayman et al. (2008:386), who further explained that if CI is supported by appropriate policies and procedures, employees contribute effectively as well as gain from the benefits of the CI process.
4.6.9: Figure 4.21 below shows respondents’ opinions on whether CI function should be centralized and structure and culture be aligned.

Figure 4.21 above indicates that the majority of respondents (80%) agreed that CI function should be centralized and structure and culture be aligned. Thirteen percent disagreed with the statement and 7% remained neutral.

RESULTS

Figure 4.21 above indicates that the majority of respondents (80%) agreed that CI function should be centralized and structure and culture be aligned. Thirteen percent disagreed with the statement and 7% remained neutral.

DISCUSSION

Although there is a strong debate whether to centralize or decentralize the CI function, there is a possibility that decentralization might lead to less top management involvement and a loss of attention on the right things. CI is a strategic management tool, and as such, should provide the necessary intelligence to top management. Prescott (1999) agrees that centralization is recommended as it enables the CI function to gain a holistic view of the entire organization. Thus, current research findings shown in Figure 4.21 above are line with Prescott (1999).
4.6.9: Figure 4.22 below shows whether organizational awareness of CI and a culture of competitiveness are critical to garner competitiveness.

![Bar chart showing responses to the statement](chart.png)

Figure 4.22: Whether organizational awareness of CI and a culture of competitiveness are key for garnering competitive advantage.

RESULTS

Figure 4.22 above shows that the majority of respondents (65%) agreed that organizational awareness of CI and a culture of competitiveness are key for garnering competitive advantage. However, 25% disagreed while 10% were neutral.

DISCUSSION

Research findings obtained in Figure 4.22 above reveal that there is a general consensus at Focus Construction with regards to the importance of awareness of CI and a culture of competitiveness as key for garnering competitive advantage. This is in support of Fuld, (2010: 6), Garvin, (1993), Sinkula, (1994) and Slater and Narver, (1995), who share the same sentiments with current research findings obtained at Focus Construction. This is a clear indication to the management at Focus Construction inculcate a culture of competitiveness, garnering sustainable competitiveness.
4.6.10: Figure 4.23 below shows participants’ views on whether senior management support is critical for any CI activity.

![Bar chart showing participants' views on senior management support](image)

Figure 4.23: Whether senior management support is critical for any CI activity.

**RESULTS**

Figure 4.23 above shows that the majority of respondents (80%) agreed that senior management support is critical for any CI activity, 13% disagreed and 7% were neutral.

**DISCUSSION**

There is a consensus at Focus Construction that senior management support is critical for any CI activity. These findings are in support of Fuld, (2010: 9), Global Intelligence Agency (2004b: 3) and Du Toit and Muller, (2004). They explained that senior management support is important because it reinforces importance and legitimacy of CI activities. Du Toit and Muller (2004: 3) further explained that, “the CI process will fail if it does not receive the necessary support and if operation of intelligence by top management is not implemented”. Fleisher and Blenkhorn (2001: 54) and Murphy (2005: 13) note that best-practice companies develop ways to make CI a part of everyone’s job.
4.6.10: OPEN-ENDED QUESTION

Question 4.2 sought respondents’ opinions regarding other CI activities important to Focus Construction. Content analysis from free responses revealed that the majority of respondents pointed to the fact that planning and focus, collection, analysis, communication, process/structure and organizational awareness/culture are the most important activities in CI. This is line with Bose, (2008), Fleisher and Blenkhorn (2003: 18), Kahaner (1996: 44), Bernhardt (1994) and McGonagle & Vella (1996), who state that CI is a system. Priporas et al. (2005) further explained that CI is both a product and a process.

4.7: TO ESTABLISH THE COMPETITIVE ANALYTICAL TOOLS USED TO CONVERT INFORMATION INTO ACTIONABLE INTELLIGENCE IN THE CONSTRUCTION INDUSTRY.

4.7.1: Figure 4.24 below shows ranking of intelligence needs in order of their importance at Focus Construction.

![Figure 4.24: Ranking of intelligence needs in order of their importance.](image)

RESULTS

Figure 4.24 above indicates that the majority of respondents (35%) gave competitor intelligence the highest ranking (1), industry intelligence came
second (2) with 17% response rate, technological intelligence was ranked third (3) with 12% response rate, supplier intelligence was ranked fourth (4) with 11% response rate, macro-environment trend analysis was ranked fifth (5) with 10% response rate, similar industry was ranked sixth (6) with 8% response rate, while customer intelligence was ranked seventh (7) with 5% response rate and other intelligence type were least ranked (8) with just 2% of respondents.

**DISCUSSION**

Competitor intelligence is the most important need for any organization especially in a fast globalized village like the one all industries are operating in. The above research findings showed that competitor intelligence is the most ranked intelligence needs at Focus Construction. However, this study has also indicated that industry, supplier, technological, macro-environmental trend analysis, similar industry and customer intelligence are important at Focus Construction. These findings are in concurrence with Fleisher and Blenkhorn (2000), who state that organizations require all forms of intelligence, although the degree of importance varies depending on the nature of the industry.
4.7.2: Figure 4.25 below shows respondents’ opinions of the ranking of intelligence needs in order of their importance.

![Figure 4.25: Categories of techniques used to analyse the business environment at Focus Construction.](image)

Figure 4.25 above shows that the majority of respondents (38%) indicated that competitor and customer analysis is highly used at Focus Construction, 30% indicated strategic analysis, 21% indicated financial analysis, 10% indicated environmental analysis and 1% indicated evolutionary analysis.

**RESULTS**

Figure 4.25 above shows that the majority of respondents (38%) indicated that competitor and customer analysis is highly used at Focus Construction, 30% indicated strategic analysis, 21% indicated financial analysis, 10% indicated environmental analysis and 1% indicated evolutionary analysis.

**DISCUSSION**

The question sought to elicit respondents’ views on the range of techniques used by Focus Construction to analyse the business environment with the assumption that the response rate has a direct and positive correlation with the importance of the technique as well as the frequency of usage. Figure 4.25 revealed that Focus Construction uses competitor and customer analysis frequently and values the information that the techniques provide to management. Strategic analysis is also used at Focus Construction. Financial analysis is also used at Focus Construction to analyze the business environment. Interesting in this study is that, all the business analytical tools are being used at Focus Construction. This is in support of Fleisher and
Bensoussan (2003), who came with all the above-mentioned five categories of analysing the business environment.

4.7.3: Figure 4.26 below shows respondents' views on CI analytical tools used at Focus Construction.

![Figure 4.26: CI analytical tools used at Focus Construction.](image)

Figure 4.26: CI analytical tools used at Focus Construction.

**RESULTS**

Figure 4.26 above shows that financial oriented tools are the most used analytical tools at Focus Construction (25%), followed by strategic analytical tools (23%), technological oriented tools (20%), customer oriented tools (15%), behavioural oriented tools (4%) and environmental tools (3%).

**DISCUSSION**

Businesses operate in a dynamic environment and as such they need to adopt and use competitive tools to gain competitive advantage over their rivals. Current research findings as illustrated by Figure 4.26, reveal that Focus Construction is using all the competitive intelligence analytical tools. These findings are in support of Fleisher and Bensoussan (2003), who came up with five categories of competitive analytical tools to analyse the business environment namely: strategic analytical tools, competitive and customer analysis techniques, environmental analysis techniques, evolutionary analysis...
techniques, and financial analysis techniques. Thus, management at Focus Construction is operating using all the competitive analytical tools which are recommended for sustainable competitive advantage in the construction industry.

4.7.4: Table 4.2: Environment-oriented analytical tools used at Focus Construction.

<table>
<thead>
<tr>
<th>Item</th>
<th>Analytical Tool</th>
<th>Frequency</th>
<th>Analytical Tool</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Boston Consulting Group Growth/Share Portfolio Matrix</td>
<td>0</td>
<td>(j) Competitor Analysis</td>
<td>35</td>
</tr>
<tr>
<td>(b)</td>
<td>Industry analysis</td>
<td>20</td>
<td>(k) Management Profiling</td>
<td>0</td>
</tr>
<tr>
<td>(c)</td>
<td>Strategic Group Analysis</td>
<td>(l)</td>
<td>(i) Scenario Analysis</td>
<td>5</td>
</tr>
<tr>
<td>(d)</td>
<td>SWOT Analysis</td>
<td>10</td>
<td>(m) Stakeholder Analysis</td>
<td>2</td>
</tr>
<tr>
<td>(e)</td>
<td>Value Chain Analysis</td>
<td>2</td>
<td>(n) Macro-environmental (STEEP) Analysis</td>
<td>5</td>
</tr>
<tr>
<td>(f)</td>
<td>Product Lifecycle Analysis</td>
<td>2</td>
<td>(o) Functional Capability and Resource Analysis</td>
<td>0</td>
</tr>
<tr>
<td>(g)</td>
<td>Growth rate Analysis</td>
<td></td>
<td>(p) Customer Value Analysis</td>
<td>5</td>
</tr>
<tr>
<td>(h)</td>
<td>Financial Ratio and Statement Analysis</td>
<td>14</td>
<td>(q) S-Curve (Technology Life Cycle) Analysis</td>
<td>0</td>
</tr>
<tr>
<td>(i)</td>
<td>Price Mapping Analysis</td>
<td></td>
<td>(r) Patent Analysis</td>
<td>0</td>
</tr>
</tbody>
</table>

RESULTS

Table 4.1 above indicates that the majority of respondents (35%) indicated that competitor analysis is mostly used as the environment analytical tool, industry analysis (20%), financial ratio and statement analysis (14%), SWOT analysis (10%), Scenario Analysis (5%), Macro-environmental (STEEP) Analysis (5%), Customer Value Analysis (5%), Value chain analysis (2%), Product Life cycle analysis (2%) and Stakeholder analysis (2%) are also environment-oriented tools used at Focus Construction.
DISCUSSION
Research findings as illustrated by Table 4.1 above reveal that competitor analysis is the mostly used tool at Focus Construction. These findings support earlier results of this study. These research findings are in accord with Kermally (2004), who state that business environment needs to be analyzed from various perspectives such as the ones being used by Focus Construction.

4.7.5: OPEN ENDED QUESTION
Question 6.5 sought respondents’ opinions with regards to other CI analytical tools. Content analysis from the questionnaires revealed that respondents advised management at Focus Construction to use Boston Consulting Group for scouting growth opportunities, Patent analysis for brands and Scenerio analysis for evaluating projects. There were no additional tools that were added to the list of those provided by Table 4.1. These results are in concurrence with Fleisher and Bensoussan (2003) and Montgomery and Weinberg (1979), who argued that the scope of environment-oriented tools cover those tools as outlined in Table 4.1.
4.8: TO DETERMINE FOCUS CONSTRUCTION’S SOURCES AND METHODS OF COLLECTING COMPETITIVE INTELLIGENCE.

4.8.1: Figure 4.27 below shows sources of CI information for Focus Construction.

![Graph showing sources of competitive information](image)

Figure 4.27: Sources of CI information for Focus Construction.

RESULTS

Figure 4.27 above shows that company staff (87%), suppliers (76%), competitors (68%), government publications (23%) and professional bodies are the main sources of CI at Focus Construction.

DISCUSSION

Research findings as outlined in Figure 4.27 reveal that company staff are the greatest source of CI at Focus Construction. These findings are in support of Viviers et al. (5005:579), who argued that internal employees are a source of intelligence. Montgomery and Weinberg (1979: 49), further explained that, for employees to be an invaluable source of intelligence, they need to be trained.
4.8.2: Figure 4.28 below shows internal sources of CI information at Focus Construction.

![Internal sources of CI at Focus Construction](image)

Figure 4.28: Internal sources of CI at Focus Construction.

**RESULTS**

Results obtained in Figure 4.28 above show that the majority of the respondents were senior management (78%), sales people (65%), procurement staff (41%), call centre staff (13%) and 5% legal personnel.

**DISCUSSION**

This question was built up from the previous question where findings revealed that internal staff are an invaluable source of CI, so of the internal staff, Figure 4.28 shows that senior management are the greatest source of CI. These results concur with previous results in this study where it was found out that senior management support are critical for CI activities. In addition, the above results also support Evans (2011), who gave examples of sales people, procurement personnel, senior managers, research personnel, call centre personnel and legal personnel, as important sources of information.
4.8.3: Figure 4.29 below shows secondary sources of CI at Focus Construction.

![Secondary sources of CI](image)

Figure 4.29: Whether the internet, publications and trade shows are main sources of CI at Focus Construction.

RESULTS

Figure 4.29 below indicates that the majority of respondents (55%) disagreed that the internet, publications and trade shows are main sources of CI at Focus Construction. Thirty percent agreed, while 15% chose to be neutral.

DISCUSSION

By synthesizing and analysing the above findings as depicted by Figure 4.29, it is crystal clear that 55% aired their opinions that the internet, publications and trade shows are not the main sources of CI at Focus Construction. These findings are in contrast to Fleisher (2008: 858), who argued that the internet, publications and trade shows are main sources of CI. The current research findings of this study are in concurrence with previous results as shown in Figure 4.27 where company staff came out to be the main of CI at Focus Construction. The high percentages of disagreeing respondents are indicative of the nature of the construction industry and the low applicability of these sources to the industry.
4.8.4: Figure 4.30 below shows importance of assessing reliability and credibility of CI sources.

![Bar chart showing percentages of respondents for each response category.]

Figure 4.30: Whether it is important to assess the reliability and credibility of CI sources.

**RESULTS**

By analyzing the above findings, one can note that 65% of the respondents agreed that it is important to assess the reliability and credibility of CI sources. However, 25% disagreed and 10% were neutral.

**DISCUSSION**

The above analysis reveals that the majority of respondents at Focus Construction allude to the fact that it is important to assess the reliability and credibility of CI sources. These findings concur with Montgomery and Weinberg (1979: 49), who suggest that methods for assessing validity of intelligence source include comparison with other data which may be available from other sources, searching for associated indicators, and face validity.
4.8.5: Figure 4.31 below shows whether employees’ reports are validated for accuracy.

![Figure 4.31: Whether employees' reports are validated for accuracy.](image)

### RESULTS

Figure 4.31 above shows that 80% of the respondents agreed that employee reports are validated for accuracy. Ten percent disagreed while 5% were neutral.

### DISCUSSION

Current research findings obtained by this study are in support of Saayman et al. (2008: 385), Strauss and Du Toit (2010: 308), McGonagle and Vella (2002: 25), Fleisher and Blenkhorn, (2000: 86).
4.8.6: Figure 4.32 below shows whether employees give top management with competitor information.

![Figure 4.32: Whether employees supply top management with competitor information.](image)

**RESULTS**

Results as depicted by Figure 4.32 indicate that 65% of respondents agreed that employees supply top management with competitor information. Twenty-five percent disagreed while 10% were neutral.

**DISCUSSION**

It is clear that the majority of respondents (65%) were of the opinion that employees at Focus Construction supply top management with competitor information. These research findings are in line with Fleisher and Blenkhorn (2003:19).
4.8.7: Figure 4.33 below shows whether there is need to set up internal knowledge team at Focus Construction.

**RESULTS**

The above results shown in Figure 4.33 indicate that 60% of the respondents agreed that there is need to set up internal knowledge team at Focus Construction. However, 25% disagreed and 10% were neutral.

**DISCUSSION**

Findings illustrated by Figure 4.33 are consistent with extant literature. Montgomery and Weinberg (1979: 49) buttress the point that organizations need to set up internal knowledge team that will monitor the CI activities all the time.
4.8.8: Figure 4.34 below shows whether employees need to be trained on how to gather CI.

![Figure 4.34: Whether employees need to be trained on how to gather CI.](image_url)

**RESULTS**

Results shown above in Figure 4.34 show that 67% of the respondents were of the opinion that employees need to be trained on how to gather CI. However, 25% disagreed while 5% were neutral.

**DISCUSSION**

The above results as depicted in Figure 4.34 reveal that the majority (67%) of the respondents agreed that Focus Construction should train its staff on how to gather CI. These research findings are in support of Montgomery and Weinberg (1979: 49), who contend that, for employees to be an invaluable source of intelligence, they need to be trained.
4.8.9: Figure 4.35 below shows importance of forms in which CI is collected.

![Figure 4.35: Importance of forms in which CI is collected.](image)

Figure 4.35: Importance of forms in which CI is collected.

**RESULTS**

Figure 4.35 above shows that 45% of the CI come in the form of verbal, 40% come in the form of electronic and 15% as printed information.

**DISCUSSION**

By synthesizing and analyzing the above findings, one can conclude that much of the CI at Focus Construction come in the form of verbal followed by electronic form and printed form. These findings are in support of the previous results of this study that indicated that the internet (electronic form of CI) is not the greatest source of CI at Focus Construction. These results also support the fact that employees are the greatest source of CI at Focus Construction and the assumption one can put is that, the CI is communicated verbally. Extant literature however, only point to the fact that CI can be collected in form of verbal, electronic and printed information.
4.8.10: Figure 4.36 below shows whether the internet is the greatest source of CI.

Figure 4.36: Whether the internet is the greatest source of CI.

RESULTS

As shown by Figure 4.36 above, 55% of respondents disagreed that the internet alone is the greatest source of CI. Thirty percent, however had different opinions and believed that the internet provides significant CI, while 15% were neutral.

DISCUSSION

It is interesting to note that the majority of respondents (55%) disagreed that the internet is the greatest source of CI. These research findings are in contrast with Evans (2011), who stated that the internet is the greatest source of CI. Thus, management is encouraged to use alternative sources of CI because information on the internet is opinionated and does not have ownership, as was cited by Viviers et al. (2005).
4.8.11: Figure 4.37 below shows whether Focus Construction employs a filtering software agent on the internet.

![Pie chart showing responses](chart.png)

Figure 4.37: Whether Focus Construction employs a filtering software agent on the internet.

RESULTS

Figure 4.37 above indicates that 65% of the respondents stated that Focus Construction does not employ a filtering software agent on the internet. Twenty percent were not sure whether their organization employs a filtering software agent on the internet, while 15% indicated that their organization employs a filtering software agent on the internet.

DISCUSSION

The above results repel extant literature. Chen et al. (2001:5) note that organizations should employ software agents that filter information on the internet but management at Focus Construction do not seem to employ a software agent to filter CI on the internet as recommended by Chen et al. (2005).

4.8.13: OPEN-ENDED QUESTION

Question 5.6 sought respondents’ views on other sources and methods of collecting CI. Free responses from the returned questionnaires indicated that
respondents had no other sources and methods of collecting CI. This implies that they contradicted the ones given by Fleisher and Blenkhorn (2003).

4.9: TO DETERMINE THE KEY DRIVERS WHICH MAKE COMPETITIVE INTELLIGENCE SYSTEM A SOURCE OF SUSTAINABLE COMPETITIVE ADVANTAGE.

4.9.1: Figure 4.38 below shows whether CI is a business necessity at Focus Construction.

Figure 4.38: Whether CI is a business necessity at Focus Construction.

RESULTS

Figure 4.38 above shows that 75% of the respondents agreed that CI is a business necessity at Focus Construction. However, 18% disagreed, while 7% were neutral.

DISCUSSION

The above findings reveal that CI is a business necessity at Focus Construction. This is in concurrence with Tyson (2002: 3) and Smith (2005:87), who argue that CI is a business necessity due to various conditions that exist in today’s business environment.
4.9.2: Figure 4.39 below shows whether the fast pace of business environment is a key driver of CI in the construction industry.

![Bar chart showing distribution of responses](image)

Figure 4.39: Whether the fast pace of business environment is a key driver of CI in the construction industry.

**RESULTS**

Results indicate that 72% of the respondents agreed that the fast pace of business environment is a key driver of CI in the construction industry. However, 25% disagreed and 3% were neutral.

**DISCUSSION**

The above research findings reveal that the fast pace of business environment is a key driver of CI. These findings are in support of Hannula and Pirttimaki (2003), who further explained that, “such complex and unstable environment necessitates a growing need for timely, first-rate business information and knowledge”.

95
4.9.3: Figure 4.40 below illustrates respondents’ opinions on whether increased global competition from new competitors is a key driver of CI in the construction industry.

![Bar chart showing respondents' opinions on increased global competition from new competitors as a key driver of CI.]

Figure 4.40: Whether increased global competition from new competitors is a key driver of CI in the construction industry.

RESULTS

Figure 4.40 above indicate that 70% of the respondents agreed that increased global competition from new competitors is a key driver of CI in the construction industry. However, 22% disagreed, while 3% were neutral.

DISCUSSION

The above research findings support Guimaraes (2000:117) and Tyson (2002: 3) who argued that increased global competition from new competitors is a key driver of CI.
4.9.4: Figure 4.41 below shows respondents’ opinions on whether rapid technological change is also a key driver of CI in the construction industry.

Figure 4.41: Whether rapid technological change is also a key driver of CI in the construction industry.

RESULTS

Figure 4.41 above shows that 63% of the respondents indicated that rapid technological change is also a key driver of CI in the construction industry. However, 30% disagreed to the statement, while 7% remained neutral.

DISCUSSION

Results obtained by this study are in support of Tyson (2002: 3) who stated that rapid technological change and innovation is a key driver of CI.
4.9.5: Figure 4.42 below shows respondents’ opinions on whether political and regulatory changes are affecting the construction industry quickly and rapidly.

![Bar Chart]

Figure 4.42: Whether political and regulatory changes are affecting the construction industry rapidly.

**RESULTS**

Results presented by Figure 4.42 above indicate that 72% of the respondents agreed that political and regulatory changes are affecting the construction industry rapidly.

**DISCUSSION**

These results are in line with Montgomery and Weinberg (1979: 42).

**OTHER KEY INDUSTRY DRIVERS**

This question sought to elicit from respondents other key drivers of the construction industry. Content analysis from the 28 questionnaires reveal that the majority of respondents pointed to the fact that changing societal preferences and life styles, entry/exit of major players, globalization, political uncertainty and business risk, changes in costs and efficiency and the construction industry long-term growth rate. These results are not supported by extant literature gathered in this study.
4.9.6: OPEN ENDED QUESTION

Question 7.2 sought respondents’ opinions regarding how to make CI a source of competitive advantage. By synthesizing and analysing the content from 28 questionnaires, it was interesting to note that the majority of respondents recommended for staff training on CI, periodic competitor analysis, customer satisfaction surveys, setting up an internal CI audit department and also setting up a research and development department so that there can be product and market innovation at Focus Construction.

4.10: TESTING OF RESEARCH PROPOSITION

The research proposition for this study which says that, “Focus Construction’s competitive strength in the construction industry is weak due to lack of Competitive Intelligence.”

Although there are some critical areas that need to be improved, the overall conclusion obtained by this study from all the four objectives is that, competitive strength for Focus Construction is strong and therefore management at Focus Construction have been able to adopt the CI systems.

4.10 CHAPTER SUMMARY

Chapter 4 presented research findings obtained by this study. Discussions were also done on the analyzed results and implications drawn. The next chapter provides a summary of major findings and draw conclusions from these findings in line with the study’s objectives. In addition, Chapter 5 will provide recommendations and provide the direction for future studies.
CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION
This chapter revisits the main research problem, research objectives and research questions as outlined in Chapter One, tests the research proposition, presents a number of recommendations flowing from the research and then provides the possible areas of further research identified in this study.

5.2 CONCLUSIONS
The research objectives of this study as set under section 1.5 of this study in their original order were as follows:

5.2.1. To establish whether Focus Construction’s strategy, culture and structure would support the adoption of CI systems.
5.2.2. To ascertain the particular activities in the CI system.
5.2.3. To determine Focus Construction’s source and methods of collecting intelligence.
5.2.4. To establish the competitive analytical tools used to convert information into actionable intelligence in the local construction industry.
5.2.5. To determine the key drivers which make competitive intelligence systems a source of sustainable competitive advantage.

These objectives directly inform the researcher of the research questions as outlined in section 1.5 of this report and therefore it follows that once the research objectives have been addressed, the research questions will also have been answered. Recommendations will be outlined separately in the subsequent section.

From the findings and discussions in Chapter 4, the following conclusions are made:

• The strategy, culture and structure at Focus Construction are able to support the adoption of CI systems.

• Planning and focus, collection, analysis, communication, process/structure and organizational awareness are the main activities in the CI system.
• Employees are the major source of CI at Focus Construction and they collect and report CI verbally.

• The internet is not the greatest source of CI.

• Focus Construction uses strategic, competitive, environmental, product-oriented, customer-oriented, financial-oriented, technological-oriented and behavioural-oriented analytical tools.

• Competitive intelligence is the most sought intelligence at Focus Construction.

• The popular and traditional strategic analytical tools such as STEEP, SWOT analysis, industry analysis, financial ratio and statement analysis are used at Focus Construction.

• The fast pace of the business environment, increased global competition from new competitors, rapid technological change and innovation and political and regulatory changes are key drivers of CI in the construction industry.

5.3 RECOMMENDATIONS

This study makes the following recommendations:

5.3.1: Focus Construction is recommended to adopt CI systems so that they can garner sustained competitive advantage in the construction industry. This study has empirically established that CI systems are applicable at Focus Construction.

5.3.2: Focus Construction is recommended to train all its employees on how to gather, analyze and report on CI.

5.3.3: Focus Construction is recommended to invest into more up-to-date plant and factory equipment so that they can be cost effective and time efficient.

5.3.4: Focus Construction is recommended to set up an internal CI audit department so that there will be periodic audits of CI.
5.3.5: Focus Construction is recommended to set up a research and development department to improve its marketing and product innovation and use construction industry best practices.

5.3.6: Focus Construction is recommended to implement appropriate policies and procedures that motivate staff and make CI a part of every employee’s job.

5.3.7: Senior management at Focus Construction is recommended to continue supporting CI activities by inculcating a high performing and competitive culture.

5.4 VALIDATION OF THE RESEARCH PROPOSITION

Although there are some critical areas that need to be improved, the overall conclusion obtained by this study from all the four objectives is that, competitive strength for Focus Construction is strong and therefore management at Focus Construction have been able to adopt the CI systems. This therefore, leads the researcher to disconfirm the research proposition which says that, “Focus Construction’s competitive strength in the construction industry is weak due to lack of Competitive Intelligence.”

5.5 AREAS OF FURTHER STUDY

This research study sought to close the gap in the field of CI researches that have been conducted in Zimbabwe. As such the researcher suggests that areas of further research should focus on:

1. Assessing the impact of the construction of ICT infrastructure on the performance of construction companies.

2. Investigating whether training of staff on CI would improve competitive strength of organizations in the construction industry.

Such research will be beneficial for providing more insights into the use of CI in the construction industry and other sectors of the economy at large.
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APPENDICES

APPENDIX I: RESEARCH INTRODUCTORY LETTER

TO WHOM IT MAY CONCERN

15 June 2012

Dear Sir/Madam

RE: MBA RESEARCH QUESTIONNAIRE

The researcher is a final year student studying for a Master of Business Administration Degree with the Graduate School of Management at the University of Zimbabwe. The researcher is conducting a study which seeks to carry out “AN INVESTIGATION INTO THE APPLICABILITY OF COMPETITIVE INTELLIGENCE IN THE CONSTRUCTION INDUSTRY: THE CASE OF FOCUS CONSTRUCTION (2009 –2012)”. This research is an issue of great importance within Zimbabwe and yet little is currently known about the applicability of Competitive Intelligence systems on business performance.

You are one of a small number of people who are being asked to give your opinion on this issue.

The researcher would be grateful if you could assist by completing and returning the attached questionnaire. The researcher anticipate that the questionnaire would take approximately 30 minutes of your time and the researcher will collect it by end of the day on 25th of June 2011.

If you have any questions you wish to ask or there is anything you wish to discuss, please do not hesitate to call the researcher on the following telephone number: +263 77 2 400 045.

All information you provide will be totally confidential and will not be disclosed to third parties without your permission. You will notice that your name and address will not appear on the questionnaire and that there is no identification number. This is purely an academic research and all the information received will be treated in the strictest of confidence.

Thank you in advance for your assistance in this matter.

Yours faithfully

PETROS ISAAC KANJERA (R093226R)
APPENDIX II: RESEARCH QUESTIONNAIRE FOR MANAGEMENT AND STAFF AT FOCUS CONSTRUCTION.

SECTION A

1.0: PURPOSE OF THE STUDY

The aim of this study is to investigate the applicability of competitive intelligence in the construction industry in the face of continuously changing business environment.

1.1. DEFINITION OF COMPETITIVE INTELLIGENCE

A systematic and ethical program for gathering, analyzing, and managing external information that can affect a company’s plans, decisions, and operations.

SECTION B

2.0: BACKGROUND INFORMATION

Please tick (✓) your options on the spaces provided below:

2.1 In which category of workers do you belong to?

<table>
<thead>
<tr>
<th>Option</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Senior management</td>
<td></td>
</tr>
<tr>
<td>(b) Middle management</td>
<td></td>
</tr>
<tr>
<td>(c) First line/ supervisory level</td>
<td></td>
</tr>
<tr>
<td>(d) Administrative staff</td>
<td></td>
</tr>
<tr>
<td>(e) Junior / plant staff</td>
<td></td>
</tr>
<tr>
<td>(f) Other (please, specify)</td>
<td></td>
</tr>
</tbody>
</table>

2.2 For how long have been employed by Focus Construction?

<table>
<thead>
<tr>
<th>Option</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Less than a year</td>
<td></td>
</tr>
<tr>
<td>(b) 1 – 5 years</td>
<td></td>
</tr>
<tr>
<td>(c) 6 – 10 years</td>
<td></td>
</tr>
<tr>
<td>(d) Above 10 years</td>
<td></td>
</tr>
</tbody>
</table>

2.3 Please, indicate your level of education by ticking the appropriate box

<table>
<thead>
<tr>
<th>Option</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Secondary level</td>
<td></td>
</tr>
<tr>
<td>(b) Certificate</td>
<td></td>
</tr>
<tr>
<td>(c) Diploma</td>
<td></td>
</tr>
<tr>
<td>(d) Undergraduate degree</td>
<td></td>
</tr>
</tbody>
</table>
(e) Masters degree [ ]

(f) Other (please, specify) .............................................

2.4 In which department are you attached to?
(a) Administration section [ ]
(b) Marketing department [ ]
(c) Production department [ ]

SECTION C

3.0: TO ESTABLISH WHETHER FOCUS CONSTRUCTION’S STRATEGY, CULTURE AND STRUCTURE WOULD SUPPORT THE ADOPTION OF CI SYSTEMS.

3.1. Do you know the vision, mission and goals for Focus Construction? Please tick (√) the applicable option.

Yes [ ] No [ ] Not Sure [ ]

3.2 If your answer to question 3.1 above is “Yes”, do you know and / or have access to the current strategy for Focus Construction? Please tick (√) the applicable option.

Yes [ ] No [ ] Not Sure [ ]

3.3 Do you know the term organizational culture? Please tick (√) the applicable option.

Yes [ ] No [ ] Not Sure [ ]

3.4 If your answer to question 3.3 is “Yes”, in your own opinion, which type of organizational culture best describes Focus Construction? Please tick the applicable.

(a) High performing culture [ ] (b) Low performing culture [ ] (c) Not sure [ ]

3.5 In your own opinion, which organizational structure best describes Focus Construction? Please tick (√) the applicable option.

(a) Flat structure (b) Matrix structure (c) Tall structure (d) Not sure

3.6 In your view, do you think that there is a fit between the strategy, culture and structure at Focus Construction? Please tick (√) the applicable option.

Yes [ ] No [ ] Not Sure [ ]
3.7 If your answer to question 3.6 above is “Yes”, in your own opinion, do you think that the strategy, culture and structure at Focus Construction would support the adoption of competitive intelligence?

Yes [ ] No [ ] Not Sure [ ]

3.8 In our organization, management conducts regular meetings where intelligence needs for decision making or strategic planning are made known to a department responsible for gathering market intelligence

Agree [ ] Disagree [ ] Not Sure [ ]

3.9 In your own opinion, what would you recommend to Focus Construction with regards to its strategy, culture and structure if they are to adopt competitive intelligence systems? Please use the space provided below:

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

SECTION D

4.0: TO ASCERTAIN THE PARTICULAR ACTIVITIES IN THE CI SYSTEM.

4.1 Please indicate by ticking whether you agree with the following statements regarding the particular activities in the competitive intelligence system.

For your answer, make use of the five (5) point Likert’s scale which varies from “Disagree Strongly” (1) to “Agree Strongly” (5) as illustrated below:

Key:

<table>
<thead>
<tr>
<th>DISAGREE STRONGLY</th>
<th>DISAGREE</th>
<th>NEUTRAL</th>
<th>AGREE</th>
<th>AGREE STRONGLY</th>
<th>UNKNOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

4.1.1 Planning and focus is a pre-requisite stage that involves working with decision makers to discover their intelligence needs.

4.1.2 Intelligence needs should be translated into key intelligence topics which seek to answer, “What information is needed, why it is needed and when it
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.3</td>
<td><strong>Collection of information</strong> includes identifying all potential sources of information, researching and gathering the right data legally and ethically from all available sources.</td>
</tr>
<tr>
<td>4.1.4</td>
<td>If our organization is to adopt CI, it will be important to ensure that information and its sources are tested for reliability and credibility.</td>
</tr>
<tr>
<td>4.1.5</td>
<td><strong>Analysis stage</strong> involves a systematic examination of relevant data, information, and knowledge collected, for applicability or significance, and the transformation of the results into actionable intelligence.</td>
</tr>
<tr>
<td>4.1.6</td>
<td>If our organization is to adopt CI, analysis stage should be the cornerstone otherwise we may end up with information overload but with intelligence deficiencies.</td>
</tr>
<tr>
<td>4.1.7</td>
<td><strong>Effective communication</strong> dominates analysis; unless the message from the analysis is communicated effectively, trust and credibility with intelligence users will not be enhanced.</td>
</tr>
<tr>
<td>4.1.8</td>
<td>If our organization is to adopt CI, there will be need to ensure timely dissemination of intelligence to decision makers.</td>
</tr>
<tr>
<td>4.1.9</td>
<td>CI requires appropriate <strong>policies, procedures, and a formal or informal infrastructure</strong> so that employees may contribute effectively to the CI system as well as gain from the benefits of the CI process.</td>
</tr>
<tr>
<td>4.1.10</td>
<td>Our organizational structure and culture need to be arranged so that communication occurs across business units and CI function should be centralized.</td>
</tr>
</tbody>
</table>
| 4.1.11  | **Organizational awareness of CI and a culture of competitiveness** are critical for a firm to use CI as
a successful competitive tool.

4.1.12 Senior management support is crucial for any CI activities and top management should make CI a part of everyone’s job.

4.2 In your own opinion what other activities do you think will be most important to Focus Construction if they were to adopt CI?

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SECTION E

5.0: TO DETERMINE FOCUS CONSTRUCTION’S SOURCES AND METHODS OF COLLECTING COMPETITIVE INTELLIGENCE.

5.1 Sources of CI can either be primary or secondary, published or unpublished, internal or external to the company. The following are some of the sources of CI, please, tick all that are applicable option(s) to your organization.

(a) Government publications [ ]
(b) Competitors [ ]
(c) Suppliers [ ]
(d) Company staff (Internal employees) [ ]
(e) Professional bodies [ ]

5.2 Internal employees are a major source of CI for many companies. The following are some of the internal sources of CI. Please, tick all the applicable option(s) to your organization.

(a) Salespeople [ ]
(b) Procurement staff [ ]
(c) Senior management [ ]
(d) Research and development staff [ ]
(e) Call centre staff [ ]
(f) Legal personnel [ ]
5.3 Pease indicate by ticking whether you agree with the following statements regarding your organization’s collection of competitive intelligence.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Not Sure</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.3.1</td>
<td>Secondary sources of information (e.g. internet, publications, trade shows etc) are our main sources of information compared to primary sources such as market research.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.2</td>
<td>It is important to assess the reliability and credibility of our sources of information (e.g. internet, newspapers, internal staff etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.3</td>
<td>Employees’ intelligence reports should be cross-checked with published data as a way of validating the accuracy of the intelligence source.</td>
<td></td>
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<tr>
<td>5.3.4</td>
<td>Our employees occasionally supply information about foreign competitors or relevant emerging technologies to senior managers.</td>
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<tr>
<td>5.3.5</td>
<td>There is need to set up an internal knowledge audit team that will periodically capture the knowledge that employees have about the market.</td>
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<tr>
<td>5.3.6</td>
<td>Our internal staff employees occasionally supply information about foreign competitors or relevant emerging technologies to senior managers.</td>
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<tr>
<td>5.3.7</td>
<td>Our employees need to be trained on how to gather competitive intelligence.</td>
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</tbody>
</table>
5.4 The following are some of the forms in which CI can be collected. Please, rank the forms in order of their importance to you on a scale of 1 – 3; 1 being the most used form and 3 being the least used form when collecting CI.

(a) Electronic [ ]
(b) Printed [ ]
(c) Verbal [ ]

5.5 For the following questions indicate whether you agree with the given statements. If you agree tick “Yes” and if you disagree tick “No”.

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>YES</th>
<th>NO</th>
<th>NOT SURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.5.1</td>
<td>Eighty percent of the CI information is available from secondary sources and management should spend 20% of their time on collecting secondary information.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5.2</td>
<td>The internet is the greatest source of our CI information.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5.3</td>
<td>We employ a software agent that monitors and filters information on the internet.</td>
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</table>

5.6 In your own opinion, what other sources and methods of collecting CI would you recommend to your organization?

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SECTION F

120
6.0: TO ESTABLISH THE COMPETITIVE ANALYTICAL TOOLS USED TO CONVERT INFORMATION INTO ACTIONABLE INTELLIGENCE IN THE LOCAL CONSTRUCTION INDUSTRY.

6.1 The following are some of the most important intelligence needs of organizations. Please, rank / order the needs in terms of their importance to your organization on a scale of 1 – 8; 1 being the most important need and 8 being the least important need.

(a) Customer Intelligence
(b) Competitor Intelligence
(c) Supplier Intelligence
(d) Industry Intelligence
(e) Similar Industry Intelligence
(f) Technological Intelligence
(g) Macro-environment trend analysis
(h) Customer Industry Intelligence

6.2 The following are some of the categories of techniques used to analyze the business environment. Please, tick all the applicable option(s) to your organization.

(a) Strategic Analysis
(b) Competitive and Customer Analysis
(c) Environmental Analysis
(d) Evolutionary Analysis
(e) Financial Analysis

6.3 The following are some of the CI analytical tools. Please, tick all the applicable option(s) to your organization.

(a) Strategic analytical tools
(b) Customer - oriented analytical tools
(c) Product – oriented analytical tools
(d) Environment – oriented analytical tools
(e) Financial – oriented analytical tools

(f) Technological – oriented analytical tools

(g) Behavioural – oriented analytical tools

6.4 The following are some of the various CI analytical tools used by organizations. Please, tick all the applicable option(s) to your organization.

<table>
<thead>
<tr>
<th>Item</th>
<th>Analytical Tool</th>
<th>Tick</th>
<th>Analytical Tool</th>
<th>Tick</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>Boston Consulting Group Growth/Share Portfolio Matrix</td>
<td>(j)</td>
<td>Competitor Analysis</td>
<td></td>
</tr>
<tr>
<td>(b)</td>
<td>Industry analysis</td>
<td>(k)</td>
<td>Management Profiling</td>
<td></td>
</tr>
<tr>
<td>(c)</td>
<td>Strategic Group Analysis</td>
<td>(l)</td>
<td>Scenario Analysis</td>
<td></td>
</tr>
<tr>
<td>(d)</td>
<td>SWOT Analysis</td>
<td>(m)</td>
<td>Stakeholder Analysis</td>
<td></td>
</tr>
<tr>
<td>(e)</td>
<td>Value Chain Analysis</td>
<td>(n)</td>
<td>Macro-environmental (STEEP) Analysis</td>
<td></td>
</tr>
<tr>
<td>(f)</td>
<td>Product Lifecycle Analysis</td>
<td>(o)</td>
<td>Functional Capability and Resource Analysis</td>
<td></td>
</tr>
<tr>
<td>(g)</td>
<td>Growth rate Analysis</td>
<td>(p)</td>
<td>Customer Value Analysis</td>
<td></td>
</tr>
<tr>
<td>(h)</td>
<td>Financial Ratio and Statement Analysis</td>
<td>(q)</td>
<td>S-Curve (Technology Life Cycle) Analysis</td>
<td></td>
</tr>
<tr>
<td>(i)</td>
<td>Price Mapping Analysis</td>
<td>(r)</td>
<td>Patent Analysis</td>
<td></td>
</tr>
</tbody>
</table>

6.5 What other CI analytical tools would you recommend your organization to use? Please, make use of the spaces provided below:

..........................................................................................................................................................
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SECTION G

7.0: TO DETERMINE THE KEY DRIVERS WHICH MAKE COMPETITIVE INTELLIGENCE SYSTEM A SOURCE OF SUSTAINABLE COMPETITIVE ADVANTAGE.
7.1 Please indicate (by ticking) to what extent you agree or disagree with the following statements regarding the factors that make CI systems a critical function in your organization.

For your answer, make use of the five (5) point Likert’s scale which varies from “Disagree Strongly” (1) to “Agree Strongly” (5) as illustrated below:

<table>
<thead>
<tr>
<th>ITEM DESCRIPTION</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1.1 CI is a business necessity in our organization due to various conditions that exist in today’s business environment.</td>
<td></td>
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<tr>
<td>7.1.2 The fast pace of the business environment is a key driver of CI in the construction industry.</td>
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<tr>
<td>7.1.3 Increased global competition from new competitors is a key driver of CI in the construction industry.</td>
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<tr>
<td>7.1.4 Rapid technological change and innovation is also a key driver of CI in the construction industry.</td>
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<tr>
<td>7.1.5 Political and regulatory changes are affecting the construction industries quickly and forcefully.</td>
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</tbody>
</table>

If there are other key drivers in your industry, please, indicate by utilizing the spaces provided below:

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7.2 What recommendations would you give to your organization with regards to making CI a source of sustained competitive advantage? Please, make use of the spaces provided below:

........................................................................................................................................
End of the research questionnaire, thank you for participating in this study!