

Utilization of Competitive Intelligence to Enhance Firm Performance: A Case of South African Small and Medium Enterprises

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Abstract

The purpose of this paper was to gauge the extent to which the utilization of competitive intelligence (CI) gives rise to enhanced competitive performance in small and medium enterprise (SMEs). The research aimed to achieve this, by examining the roles of a selection of technological, and specific environmental factors in enhancing competitive advantage for SMEs, within the Telecommunications Industry in South Africa, with focus on the Gauteng Province. Underpinning this research, two models were applied; an adaptation of the modified technology acceptance model (TAM) in combination with the Perceived ease of use Model (PEOU) to investigate the extent to which SMEs in the context of South Africa can leverage CI. Using Quantitative research approach was applied where Purposive sampling was utilized as a data collecting tool from a number of individuals at lower, middle and top management levels in five different SMEs in the Gauteng Province. This research argued that perceived ease of use (PEOU) and Perceived Usefulness are the most important factors that determine the application of CI tools for competitive advantage in SMEs. The results also indicate that IT Training, SWOT and Political, economic, social and technology (PEST) are also significant explanatory factors of Competitive Intelligence (CI) in the context of Small and Medium sized Enterprises.

Keywords

Competitive Intelligence, SMEs, Perceived Ease of Use.

1. Introduction

Small business organisations have been widely

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known as an important source of employment and economic development [1]. Research into the CI practices of South African companies (both descriptive and empirical) and specifically into the CI practices of South African exporters has shown certain areas in which local companies lag behind other countries [2]. The potential of SMEs to promote domestic-led growth in new and existing industries and to strengthen the resilience of the economy in a competitive and challenging environment is inarguable [3].

2. The Problem Statement

The major challenge faced by SMEs in South Africa is that after their registration, many of them fail before reaching five years in business. This five-year mark is considered as the threshold for a business's maturity [4]. It is important to note that South Africa as a country is still challenged by the constraints of unemployment, poverty and inequality hence the success of SMEs is a major concern. Being a prolific job creator SME's failures will mean high unemployment rate. This in turn tends to lead to high crime rate as many youth will get involved in adverse activities and it will worsen the already threatened economy. The gap identified by this study was the insufficient information on how did CI contribute towards the survival of SME beyond the five year mark. The objective of the research is to propose a framework that will be used as a guideline to gauge the extent of CI contribution towards the survival of SME's beyond the five-year mark.

3. Importance of the Study

South Africa as a country continues to rank low in the world of competitiveness [5].The purpose of this research was to gauge the extent to which the utilization of Competitive Intelligence gives rise to enhanced firm performance in SMEs, by examining the roles of a selection of Technological factors and specific environmental factors in enhancing competitive advantage for SMEs within the Telecommunications in the Gauteng Province.

4. Literature Review

4.1 Small and Medium Enterprises in South Africa: The importance of SMEs in the economy expresses itself in their contribution to the GDP and employment. Small and Medium Enterprises (SMEs) account for an overwhelming part of business worldwide and that they contribute considerably to private sector GDP, employment and growth. Some estimates indicate that the total economic output of SMEs makes up about half of South Africa's GDP and that SMEs provide employment to about 60% of South Africa's labor force. It is therefore not surprising that SMEs are seen as the backbone of many economies, including the South African one [6].

5. Competitive Intelligence

Competitive Intelligence represents one of the most important pieces in strategic management of organizations in order to sustain and enhance competitive advantage over competitors [7]. In order to understand the concept of Competitive intelligence (CI) a number of definitions must be considered. CI may be defined as:

- A process involving the gathering, analysing and communicating of environmental information to assist in strategic decision-making [8].
- The process of collection, treatment and diffusion of information that has an objective: the reduction of uncertainty in the making of all strategic decisions [9].
- The process of taking large amounts of data, analysing that data and presenting a high-level set of reports that condense the essence of that data into the basis of business actions, enabling management to make fundamental daily business decisions [10].

5.1 The Competitive Intelligence Process

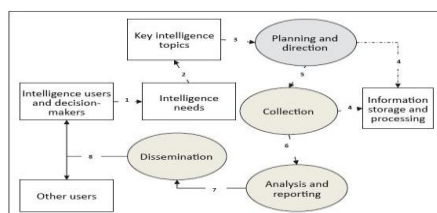


Figure 1 The competitive intelligence process.
Source: [11]

6. Research Methodology

In this section the research design is described with emphasis on the research strategy, data collection method as well as the research approach. This research followed a quantitative approach where a case study was employed. [12]states that, case studies use techniques such as structured or unstructured interviews and direct observation – including direct measurements, participant observation and group discussion – to gather information. The case study was an appropriate strategy in the reported study and focused on five SME's in the Telecommunications industry, based in Gauteng Province. For the purpose of the study, these SME's were given pseudo names. To gather the primary empirical data, quantitative survey questionnaires were used for the study. Underpinning this research, two models were applied; an adaptation of the modified technology acceptance model (TAM) in combination with the Perceived ease of use Model (PEOU) to investigate the extent to which SMEs in the context of South Africa can leverage CI.

7. Data Findings Analysis and Interpretation

Internal Comparison Reliability sometimes referred to as Internal Consistency is said to exist when the scores on several questions, all of which were designed to measure a characteristic or construct such as utilization of Competitive Intelligence (CI) are all highly correlated. A Cronbach Alpha test was undertaken to achieve this in the first instance, and the following results bear this out. Normally, a Cronbach alpha score greater or equal to 0.70 is regarded as an acceptable level for indicating internal consistency. This allows a researcher to calculate a composite score on a construct such as utilization of Competitive Intelligence (CI). The formula normally used for a cronbach's alpha measure is presented as follows:-where is the variance of the observed total test scores, and is the variance of component i for the current sample of persons. In addition to the descriptive statistics (such as frequency distributions etc.) several inferential statics were conducted in a bid to determine the significance of the relation between Competitive Intelligence (CI) and other variables (eg Technological and PEST factors), that together result in enhanced competitive advantage in small and medium enterprises. These statics were essentially measures of Association between the

predictor and criterion variables. The most important of these was Regression Analysis.

Table 1: Showing Regression

Descriptive Statistics			
	Mean	Std. Deviation	N
CI Utilization	11.6646	2.47013	164
PEOU	18.8049	2.87975	164
IT Training	22.9634	3.27641	164
Knowledge Management	23.3720	2.82876	164
SWOT	34.5549	5.83858	164
PEST	25.5610	4.62747	164

As a measure of association, Regression analysis is utilized to ascertain the degree of Association between variables. That is, it's about knowing if a high level of one variable tends to be associated with (or goes with) a high or low level of another variable. Based on the findings the results proved that Perceived Ease of Use (PEOU), Perceived usefulness, IT Training are the technological factors that enhance the usage of CI tools for competitive

advantage in the SMEs. The prime sampling method utilized in this study was convenient sampling or cohort analysis. This method was selected on the basis that it would ensure greater homogeneity of the respondents surveyed. It was important to ascertain how successful this exercise has been. To this end, descriptive statistics were used to present the frequency distributions of subject responses. A summary is presented below.

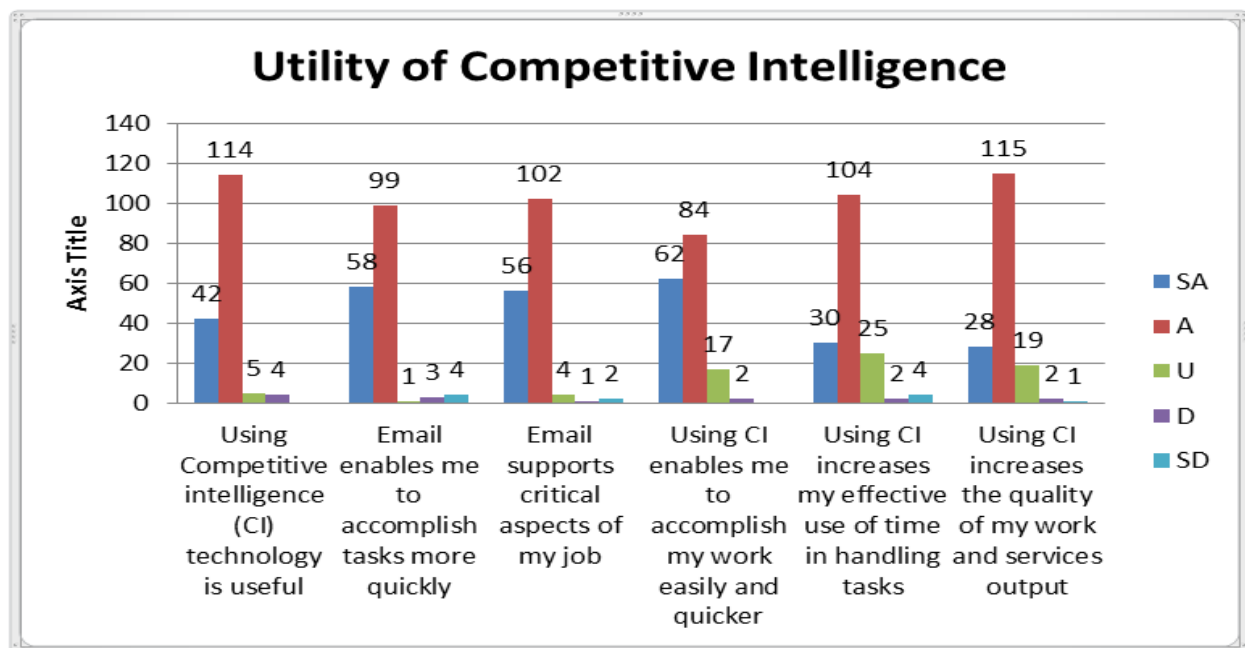


Figure 2 Utility of Competitive Intelligence

Figure two above summarizes the responses when participants were asked about their use of competitive intelligence; this included the usefulness of CI technology tools.

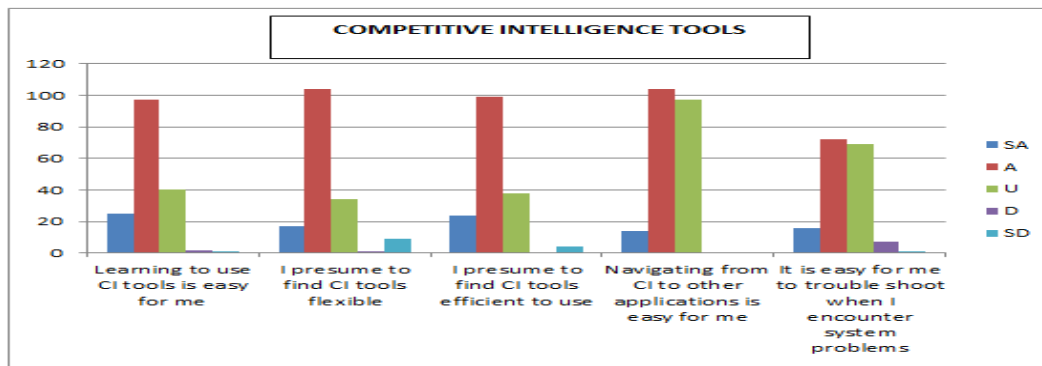


Figure 3 Showing CI Tools

The figure above summarizes participants' the perceived ease of use of CI tools. And figure 4 below is a summary of the usage of I.T tools with regards to the use and protection of organizational information.

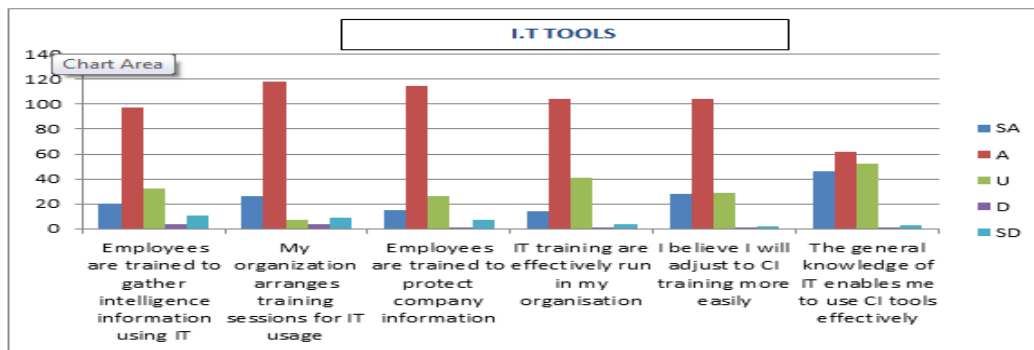


Figure 4 Showing IT tools

From the findings, it was established that technological factors, perceived ease of use and perceived usefulness are the most important factors that explain the utility of Competitive Intelligence (CI). It is hypothesized that environmental factors could have a negative impact on a firm's performance. However, based on the findings the results have only proven that Perceived Ease of Use (PEOU), Perceived usefulness, IT Training are the technological factors that enhance the usage of SWOT and PEST to enhance competitive advantage in SME's. These explain the new framework for utilization of CI tools in SME's.

8. Conclusion

This study revealed, by examining the roles of a selection of Technological factors and specific environmental factors in enhancing competitive advantage for SMEs, that utilization of Competitive Intelligence can prove to give rise to enhanced

performance within these SMEs, within the Telecommunications Industry in Gauteng Province. Through the research, it was further established that, Enterprises in South Africa need more information-handling skills if they want to successfully participate in a rapidly changing world because, globalization implies heightened mobility, international competition and greater environmental uncertainty. Survivors must acquire the skills and flexibility associated with intelligence [13]. Informal monitoring of competitive developments is no longer sufficient to ensure timely warning of competitors' moves or the opening of new opportunities. Increasingly, trade performance will depend on the quality of a country's coordinated intelligence capabilities. Effective competitive intelligence can give South African enterprises many strategic advantages. Commercial success will be more and more dependent on having the best intelligence systems and resources and that means proper intelligence management. Changes in patterns of

access to and utilization of intelligence, knowledge and information are taking place daily in industrialized countries and there are many ways of responding to the intelligence challenge. South African manufacturing enterprises should take cognizance of developments in other countries [13]. It is therefore the attitudes of people with regards to acceptance and leverage of technology for the enhancement of business in order to gain a competitive edge.

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