

Chapter 10

Information Systems Innovations Using Competitive Intelligence

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ABSTRACT

The chapter outlines Information System's (IS) innovations using Competitive Intelligence (CI). The theoretical foundation supporting this chapter was reviewed and Information System framework was implemented. Recommendations as to how the framework for Information Systems innovation was implemented have been addressed in this chapter. Knowledge is used as a focal factor for competitive advantage, through effective and efficient performances by employees in many organisations. As a result, knowledgeable employees are expected to share their knowledge with others to increase innovation within the organisation. Unfortunately, this is not always the case. Generally, employees behave differently within an organisation. The main challenge is that no organisation has total control of its employees' behaviour and actions. The behaviour and action has an impact on how Information Systems are deployed for innovation, in creating competitive advantage. As a result, many systems have been deployed by different organisations in attempt to address this challenge for the interest.

1. INTRODUCTION

Through Information Systems, an organisation executes its business strategy and attempts to realize its business goals. Lederer & Gardiner, 1992 refer to this as 'a portfolio of computer-based applications'. The Information Systems component is largely responsible for meeting the goals and objectives of the organisation. According to Iyamu & Olumide, (2010) the Information Systems component consists of systems through which the business carries out its processes and logic. They

are directly used by the end user (those who act on behalf of the business). Many organisations use Information Systems as a tool for their various innovations to support and enable processes and activities. Innovation is an on-going process to create, enable and support improvement for competitive advantage by the organisation (Mariano & Pavesi, 2010). William & Baumol, (2010) argued that large firm's use innovation as a competitive weapon, a compound of systematic innovative activity within the firm. However, innovation carries with it significant risks.

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Companies keep competing against each other using products and services, making Competitive Intelligence (CI) an important tool in the development of strategy in the organisations. The importance of Competitive Intelligence is attributed to its contribution to technological knowledge and intelligence, and its use for the analysis of Information Systems innovation in organisations. It should be pointed out early that innovation and technology are often taken in a similar light as asserted by Rogers (2003) that 'we often use the word "innovation" and "technology" as synonyms.' And as such CI is primarily intended to be used for the state of art, technological trends and challenges, with a strategic vision on competitiveness and customers (Ashton & Klavans, 1997; Fleisher, 2003). Competitive Intelligence therefore can be considered as a tool for innovation process, observation of market, analysis of strategic behaviors of both competitors and customers, including their values, expectations and needs (Krücken-Pereira, Debiasi, & Abreu, 2003).

An innovation according to Rogers, (2003) is considered as 'an idea, practice, or object that is perceived as new by an individual or other unit of adoption.' A unit of adoption in this case could be the organisation, a society and also a target market. Technological Innovation in products and processes constitutes a crucial factor for national economic growth (Manual De, 2008; Lacerda & et.,al, 2001). According to Fang (2005) Innovation can be divided into three categories: Radical innovations, Incremental innovations, and Product innovation. Martins & Terblanche, (2003) define innovation as "the implementation of a new and possible problem-solving idea, practice or material artefact (e.g. a product) which is regarded as new by the relevant unit of adoption and through which change is brought about".

Competitive Intelligence offers a real strategic advantage for many businesses (Stephen, 2006) Gilad, (2000) argues that some of the largest cor-

porate organizations have a dedicated CI department, while smaller businesses often practice CI on an ad hoc basis. This they do so by informally collecting information from a variety of internal and external sources, such as the Internet, trade shows conferences and networking meetings. Competitive Intelligence is of importance to many businesses mainly because it helps to formulate strategy, as well as make informed decisions.

The CI is deployed with the intention to better, coordinate internal processes and activities of organizations, primarily, to reach market more effectively. Gathering people, the logic and the physical architecture around common purposes provide individuals with the information they need to expand their own knowledge (Malhotra, 2000; Hoven & Van, 2001). This approach help to build high performance teams in the organisation. This indeed, is the foundation of the integrated organisation, where the information technology is capacitating technological innovation.

Competitive Intelligence has the main function of processing and refining information and knowledge, whether it is within an organisation or in a network of organisations. Martre & Jean-Louis, (1994) argues that complex modes of competition in organisations are increasing and are characterized by cooperation-competition relationships to which companies must adapt. Competitive Intelligence should be applied to adjust strategy to the new paradigm of competition. McCord, (2002) view, competition leads to collaboration and Competitive Intelligence.

Competitive Intelligence and Information Systems seem to have a common focus, to meet the needs of the users. Information Systems in many ways enable the gathering of information that later becomes Competitive Intelligence. And Competitive Intelligence facilitates the creation of information system innovations in the way it is used during the process of improving products and services.

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