COMPETITIVE ADVANTAGE THROUGH BUSINESS PERFORMANCE MANAGEMENT

Dr. Joseph C. Blankenship, Youngstown State University, joe.blankenship@comcast.net,

ABSTRACT

Today’s competitive business environments require business organizations to employ every method at their disposal in order to understand their internal and external business environments. Business organizations no longer can sustain a competitive advantage for a prolonged period without proactively collecting and analyzing business intelligence (BI) and competitive intelligence (CI) to manage their businesses performance (BPM) in real-time. A linear quantitative approach will support the qualitative portion of the study. Many leading business research firms have stated that numerous business organizations do not understand the current need for them to incorporate real-time (BI), (CI), and BPM in conjunction with their strategic business plan to gain or maintain a competitive advantage.

Keywords: Enterprise Intelligence, Business/ Competitive Intelligence, DSS, Executive Information System, Enterprise Information Intelligence

INTRODUCTION

Business organizations have moved through several generations of information management starting with the era of mechanization in 1765 (18), continuing after World War II, until the early 1970s. Except for a few brief periods during this evolution, demand for goods and services usually exceeded the supply and traditional business methods were enough to keep business organizations competitive (15). By the early seventies, a shift from heavy production to a highly technical information society was underway requiring business organizations to employ new methods to remain competitive (15). Today businesses must use all of their resources to compete on the edge of technology and survive (5).

This approach will allow organizations to not only use historical information in their strategic plan, but also current information to forecast gains from the proactive changes (real-time) made to the business performance management processes. Business organizations have been trying to understand their businesses and markets through formal techniques such as environmental analysis (where they analyze their strengths, weaknesses, opportunities, threats, SWOT), management level systems that combine data and sophisticated analytical guidelines or data analysis tools to support decisions (decision support systems, DSS). Justin Kestelyn supports these realities based on his business philosophy published in the Journal, Intelligence Enterprise. The article’s central idea “Is business performance management the culmination of the drive to make business intelligence, competitive intelligence, and analytics the “brains” of the entire enterprise?”
General Outline of COMPETITIVE ADVANTAGE

The lack of understanding and ability to employ business intelligence (BI), competitive intelligence (CI), and business performance management (BPM) in support of their strategic business plan has caused many business organizations to disappear or lose their competitive advantage in their markets. By doing business in this manner, organizations are not growing or gaining a competitive advantage (17). Business organizations tend to keep their eye on the target of profitability without understanding that BI, CI, and BPM are required to assist them in proactively determining their markets and customers are changing (8).

Past studies by (4, 5; 6, 9; 11; 12) only considered the application of business and competitive intelligence. These studies did not consider BI, CI, BPM, and the directional impact they may have on meeting the key performance indicators (KPIs) outlined in a strategic business plan.

In today’s business world, organizations must apply every tool at their disposal in an effort to gain and keep a competitive advantage. This study is to determine how business organizations view and use business intelligence, competitive intelligence, business performance management, and key performance indicators to foster competitive advantage. Two organizations were selected for the qualitative portion of the study while a questionnaire was used to query a much larger group (300) of business organizations for the quantitative portion of the study. Each of the interviewed organizations has been identified with a fictitious name, LPUSO for the service related organization and IPSO for the manufacturing related organization. The confidentiality of the organizations and their participants used during the quantitative portion of the study were protected by maintaining a blind survey return process. These factious names were used to ensure the confidentiality of each organization and the study participants. For the purposes of this study and ease of understanding business intelligence, competitive intelligence, business performance management, and key performance indicators were aggregated under the name and acronym of enterprise intelligence (EI).

This study was designed based on the principles of Mixed Methods research to ensure that the research program was able to obtain a more complete understanding of participant behavior and experience. By utilizing this approach, the researcher was able to accelerate their understanding of the organization and achieve the goals of the research in a shorter period of time (17). Methodological congruence was assured through the administration of a survey questionnaire based on the findings of the in-depth interviews. The survey questionnaire was sent to 300 participants from 20 organizations with 108 participants responding from seven industries.

The participants for the in-depth interviews were selected from a convenience sample based on three major criteria. Each participant had to perform one of the following functions within the organization: (a) Sales, (b) Marketing, (c) Users, (d) Strategic Planning, (e) Information Technology, and Corporate Management. The second criteria involved a negotiation with corporate management. The sole driver of the negotiation was to ensure an unbiased sample group. In addition, the organizations had to be large enough to support the stratification of participants used during the collection of data. Both organizations that participated in the in-depth interviews were located in Western Pennsylvania. The organizations participating in the survey portion of the study were located predominately in the eastern United States. The survey
group participants were selected from the same functions within their organizations. The basis of this group was a systematic random sample based on a list of 500 individuals assembled over the past twenty years of the researcher’s professional career. The criteria used to select two participant organizations for this study were: (a) A member of the organizational functions outlined above, (b) their organization had to be involved in information technology as a business industry or information technology. Both had to play a major focus in their daily business activities, and (c) a hashing algorithm created with Microsoft Excel was used to assign each potential participant a number using the modulus function. Once each potential participant had been assigned a number, a backward to forward indexing routine was used to determine the first 300 records from the sorting order.

The qualitative portion of this study was driven by inductive reasoning using a grounded theory model to explore and discover the possible relationships between business and competitive intelligence, key performance indicators, business process management, and competitive advantage. Grounded theory is suited for this type of study because the studies purpose is to discover current relationships and or categories related to or between the constructs outlined by the objectives and research questions. During the review of the literature, the researcher was unable to discover a set of concepts that consistently demonstrate the application of EI across the industry. Therefore, as Glaser and Strauss defined grounded theory in their 1997 statement “….the discovery of categories (or constructs) from systematically obtained data” this method is appropriate for the discovery of current relationship and or the current concepts of EI. As stated in previous sections, the goal of this study is to potentially develop or discover a set of steps from the data (3, 16).

To accomplish the goals of the study in-depth interviews, document review, and observations were performed with the objective of understanding the processes, constructs and experiences that were driving the businesses to change their approach to winning and maintaining a competitive advantage within their industry and markets (13, 17). The questions and or concepts used during the semi-structured interview process were formed through the review of the literature in and around the areas under study.

Each interview session began by explaining the purpose of the visit along with the review of a copy of the Research Project Introduction and Confidentiality agreement. All questions were then addressed before moving on with the interview. The interviews took place on the customer’s premises in a conference room or in the individual’s office. Since the organization, ISPO had a policy against audio or video recording on or within their gates all information or observations were recorded in a field notebook. Because this was the only method of recording allowed at ISPO, this same method was also used during the site visits at LPUSO. The interview sessions were held to about 60 minutes so interference with each participant’s daily task was minimized. After each interview or set of interviews, the researcher spent an equal amount of time reviewing the field notes. From this review, additional notes were made while the information was fresh or an additional list of questions were developed and sent to the participant or participants through email. The purpose of the review was to ensure understanding along with comparison and reflection of the subject matter (7, 10, 17). At this time, if observations were made they were recorded for evaluation of relevance during the data merge, analysis processes, and the emergence of categories.
When constructing the strategy to carry out the quantitative portion of this study, the themes, paradigms, and or categories that emerged during the literature review and in-depth interviews were used as the foundation for question formation on the questionnaire. The format of the survey questionnaire was based on a survey questionnaire used by the Pew Foundation during their study *The Internet and American Life Daily Tracking Survey*, May 2000 and the writings of Pamela L. Alreck & Robert B. Settle, *The Survey Research Handbook*. The substance of the questionnaire was determined during the literature review and by employing an inductive grounded theory methodology approach to identify the emerging theories from the data collected from the interview participants. The questionnaire was constructed using six sections – instructions, concept definitions, demographics, study theory, participant confirmation, and open-ended questions.

The high-level questionnaire is comprised of 53 questions broken down into: (a) 7 assessing demographic information, (b) 25 assessing the organizations application of the concepts under study, (c) 13 assessing the participant’s participation with the concepts, and (d) 7 open-ended questions assessing the organization and participant’s awareness of their markets. The multiple-choice questions were constructed using interval data on a five-point scale. The scale was initially coded with [1] Representing a lot, [2] Some, [4] Not very much, [5] Not at all and [9] Do not know/refused. Although the questionnaire responses were not represented within, the questionnaire by numeric values indicating order there was a strong implied order that was easily understood by the participants and therefore the scale was implicit within the answer choices (1, 2). The confirmation section of the questionnaire used a True/False schema to collect participant responses to the phenomena understudy, while the demographic section collected the participant’s personal information. The instruction section of the questionnaire asked participants to mark their answers with an “X.” Questions that require a written open-ended response were identified in this section with an explanation that the grey answer boxes would expand as the answer was typed. The concept definition section was added because of results from the questionnaire’s pretest. During the pretest participant were confused about the concepts identified in the questionnaire. The participants quickly informed the researcher that they had seen one or more of the questionnaire’s concepts used or defined in multiple ways within their organization, as well as in trade publications they had read. Instrument scoring was accomplished when the participants chose their responses. This method held true throughout the multiple-choice and True/False sections of the questionnaire. The open-ended responses were examined for common themes and then used to assist in the discussion in chapter five of this study (1).

**CONCLUSION**

The researcher examined the perceptions of the participant’s in-depth interviews. Their perceptions were that successful organizations survive and prosper because of their ability to collect and evaluate business intelligence in the context of their key performance indicators. This in turn gives the organization the ability to adjust their business performance allowing them to remain competitive. By examining the variable to factor relationships along with the positive and negative correlation coefficients meeting the threshold values of .400 and -.400, it can be determined, that there is a relationship between the factors outlined in question one.
Each of these constructs and their corresponding variables dealt with the elements of performance management. This analysis in conjunction with the research literature in this area demonstrates that business performance management involves every aspect of an organization. To obtain an understanding of the relationships the analyst interpreted the information across all six factors within the rotated component construct matrix “Factor [1], External Intelligence demonstrated,” “Factor [2] Competitive Performance,” “Factor [3] Leveraging Business Intelligence,” “Factor [4] Business Experience,” “Factor [5] Human Intellectual Capital,” and “Factor [6] Stakeholder Relations.” The positive relationships demonstrate support for the in-depth interviewee’s perceived themes and those of the much larger survey participant audience. The negative correlation for these construct can be associated with the participant’s stratification level within the organization and or the effect that the particular relationship has on the individual participants. The interpretation of the data demonstrates that the business organizations studied contributed their continued success and growth to their ability to use competitive intelligence in context with their key performance indicators to adjust their business performance to maximize their continued competitive advantage.

Next, the researcher examined the component construct matrix, interview themes, and literature to determine how business performance management is defined for the purposes of this study. This included human intellectual capital, stakeholder relations, business experience, competitive performance, enterprise intelligence, and advantage business intelligence. Each of these constructs and their corresponding variables dealt with the elements of performance management. This analysis in conjunction with the research literature in this area demonstrates that business performance management involves every aspect of an organization.

The results of this mixed methods study were the determination that the 29 categories determined through the studies mechanics had a direct relationship with the six factors that were determined during the factor analysis. This was demonstrated by anglicizing the positive and negative correlation coefficients between the threshold values of -.0400 or below and .0400 and above.

Finally, the researcher examined the base data looking for the underlying drivers and affects for each row and column relationship falling within the threshold values. During this process, it became clear that the negative relationships actually supported the thought that the successful business organizations, which participated during the study, do believe that enterprise intelligence and evaluation of their key performance indicators is the secret to their success. Further, it was determined that the participating organizations who have a successful enterprise intelligence program have incorporated their information systems, employee goals, rewards, and penalties, and the business planning under one umbrella call enterprise strategic planning.

The guidelines that came out of the segments of this study will give an organization the potential to avoid business risk while taking advantage of intellectual capital inside and outside of their organizations. These guidelines consist of (a) understanding each segment of your environment, (b) employ business intelligence, (c) engage your information technology executive in the executive planning of the organization, (d) bring performance management into the strategic planning process, (e) include IT strategic planning as part of your strategic planning process, (f) embrace a full competitive intelligence program as part of your planning and management.
process, (g) change the culture of your organization to accept change and reward positive performance, (h) put together an organizational value proposition that includes every layer and level of the organization, (i) change the way you evaluate the organizations and individuals success, it should no longer be based only on financial performance.

The processes and data used during this study do support the existence of business and competitive intelligence, business process management, and strategic planning within organizations that are able to lead their current markets consistently while pioneering new markets. These organizations demonstrated an understanding and proactive monitoring of their external and internal environments. Organizations that do this tend to value their employees at every level as vital parts of the organization. They lean heavily towards measuring success through measures other than financial. Measures that have been uncovered during the study include input to the knowledge of their business segments as well as the over all organization. For business organizations to survive and prosper they will need to adapt to a changing world and business environment to be proactive through the use of business intelligence (understanding and utilizing their internal strengths and culture), competitive intelligence (understanding the need to look not only at your competitors and customers but also at the stakeholders in each of your and their related environments.

REFERENCES


