Using Knowledge-Based Marketing as a framework for Managing Intellectual Marketing Capital in Higher Education Institutions

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Abstract: The purpose of this paper is to use the new paradigm of knowledge-based marketing to improve the academic understanding and managerial practice of the processes of creating and sustaining intellectual capital within the boundaries of the marketing function and activities in Egyptian universities. The objective of the research is to help in developing a conceptual framework of knowledge based marketing with especial focus on the Higher Education marketing. This is done through a comprehensive literature review in conjunction with two phases of exploratory studies. The first phase includes ten in-depth interviews with university policy makers, entrepreneurs and marketers that represent the institutional role in the proposed framework. The second phase includes ten in-depth interviews with managers responsible for designing and running the IT-Based knowledge management systems to represent the technical role in the proposed framework.

Keywords: Knowledge-Based Marketing, Marketing Higher Education, Intellectual Marketing Capital, Egyptian Higher Education

1. Introduction

The new customer centric organizations utilize the knowledge based strategy to satisfy its customers (Cader, 2007). Knowledge is the new asset that is argued to possess a significant impact on the market value of companies. In terms of warehousing, knowledge can be created and sustained by individuals or through formal systems distributed across the entire organization (Alavi & Leidner, 2001). Acquisition and utilization of knowledge involves organizations being prepared to learn. Organizational learning can provide the basis for new forms of competitive advantage on the corporate and functional levels (Starkey et al., 2005). This could happen through understanding the marketing environment and the customer's warns and deliver satisfaction through the efficient use of existing knowledge (Chaston, 2006). It should be noted that understanding by definition reflects knowledge. The objective of the paper to integrate the existing literature review and coordinate with the results of two phases of exploratory studies to develop a conceptual framework for the knowledge-based marketing focusing on its various components and impacts on the intellectual marketing capital within the Higher Education (HE) market in Egypt. Drawing upon the literature and analysis of knowledge management processes, the researchers discussed several important research issues relating to the conceptual framework of knowledge-based marketing in order to identify the importance of the topic and the need for further research.

Marketing Knowledge

The vast majority of research on knowledge management focuses on information technology while missing out on the uses of knowledge for management purposes. Knowledge-based marketing is a new paradigm shift in marketing theory that seeks to introduce marketing though to knowledge management and electronic business and how they increasingly exhibit stronger impact on marketing academia and practice.

Most of the customer centric organizations practices knowledge-based marketing strategy. It should be noted that in order to adopt this strategy, organizations need to assess the availability and accuracy of its marketing knowledge (Cader, 2007) as an input to the knowledge management system within the organization. Hence the objective of the research is to synthesize the relevant source of marketing knowledge to shape our understanding of knowledge management and knowledge-based marketing.

Generally knowledge is defined as a justified belief that is utilized to produce an action (Nonaka, 1994; Alavij & Leidner, 2001). There are several interpretations to the definition of the type and source of marketing knowledge. Based on the analysis of Alavi & Leidner (2001), these different perspectives lead to different perceptions of knowledge management and implications on the organizations' marketing strategies. To be more specific the following table (I) summarized the link.
Table (1): Knowledge Perspectives and their implications

<table>
<thead>
<tr>
<th>Knowledge Perspectives</th>
<th>Implications for knowledge Management</th>
</tr>
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<tbody>
<tr>
<td>State of mind (knowing and understanding)</td>
<td>Enhancing individual's learning and understanding</td>
</tr>
<tr>
<td>Object (stored and manipulated)</td>
<td>Building and managing knowledge stocks.</td>
</tr>
<tr>
<td>Process (applying experience)</td>
<td>Knowledge flows and the process of creation, sharing, and distributing knowledge.</td>
</tr>
<tr>
<td>Access to information (access to information)</td>
<td>Organized access to and retrieval of content.</td>
</tr>
<tr>
<td>Capability (potential to influence action)</td>
<td>Building core competencies and understanding strategic know-how.</td>
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Source: Summarized from Alavi & Leidner (2001)

Research-based marketing

Knowledge marketing has been defined from different prospective such as market information in terms of the processing and the interpretation of marketing information as a decision making tool (Morman & Miner. 1997; Cader, 2007). In today's competitive environment, the business relies on marketing research as a source of information about the consumers' attitude and needs. In addition, the results of the market research represent the basis for segmentation, differentiation and branding strategies.

Knowledge-based economy

A knowledge-based economy is an economy that is dependent on the application of knowledge, so that organizations' capabilities and efficiency in using their knowledge override other traditional economic factors such as land and capital. In a knowledge-based economy where competitiveness of marketing organizations depends on the accumulation of marketing knowledge and its rapid mobilization to produce goods and services that are characterized by: 1) superior marketing knowledge resulting in uniqueness and genuineness of marketing offerings, 2) new marketing ideas resulting in market insights and foresights and 3) applicability of marketing know-how resulting in utilization of relevant marketing information to trigger marketing policies and action plans (Anonymous, 2005).

Knowledge creation modes

Knowledge is information within people's minds or documented in objective business records. Knowledge can take the form of explicit knowledge (facts), or tacit knowledge (experience and expertise). The explicit knowledge is defined as articulated and generalized knowledge while the tacit knowledge is rooted in actions- and experience (Alavi & Leidner, 2001).

Knowledge Management System

Knowledge management in organizations has been made much effective and efficient through the advent of IT-based/enabled systems and more recently by the arrival of digital web-based technologies such as extranets, intranets and Java. For sound management purposes, knowledge ought to be acquired, prepared (edited, codified, tabulated, cleaned and statistically adjusted), analyzed, interpreted, mined, warehoused, and retrieved (Alavi & Leidner, 2001; Galliers & Leidner, 2003; Chasten, 2006; Cader, 2007). Hence the knowledge management system is defined as "a class of information systems applied to managing organizational knowledge" (Alavi & Leidner, 2001, P.14).

To visualize these knowledge processes, knowledge experts have developed knowledge systems and knowledge platforms. Further utilization of knowledge can occur through the creation of information exchange links (e.g., Inter-organizational systems) with other partner organizations within the contexts of a supply chain and/or market system configurations (Cash et al., 1994; Alavi & Leidner, 2001; Galliers & Leidner 2005; Cader, 2007).

Knowledge Management

The new trend of customer centric organizations focused on satisfying the customers to minimize the customers' tendency to switch between brands (Jones & Sasser, 1995). Hence, knowledge management is defined as the process of identifying...
and leveraging knowledge within the organization in order to increase its competitive advantage (von Krogh, 1998). Accordingly the customization of the product or the service to meet the customers' needs became a top priority for the organization. The customization of the customers needed depends on the availability of customer knowledge within the organization (Davenport et al., 2001). As a result, knowledge management reflects "managing customer knowledge and all other available knowledge within an organization to achieve the common goal of increasing organizational productivity" (Cader, 2007, p47).

Four main levels of knowledge ought to be addressed by the discipline of marketing as a scholarly area of inquiry; namely: a) episteme' (epistemological or dictionary) addressing the "what" questions concerned with fair and accurate definition of the essence of marketing phenomenon through valid and reliable measurements (e.g., defining market orientation and brand equity), b) Techno (descriptive or procedural) addressing the "how" questions explaining the techniques, procedures and logical processes leading to the emergence and sustenance of marketing phenomena (e.g., description of the diffusion process of new industrial products and buyers Information search behavior), c) theorem (underlying rationale, interpretational causation) addressing the "why" questions through providing rigorous and logically acceptable explanations of the true root causes shaping marketing phenomena thus allowing for accurate predictions of the future behavior of these phenomena (e.g., description of the motivations underlying the choice of a market research supplier and the rationale behind the adoption of Internet marketing systems), and d) Sophia (normative or prescriptive) addressing the questions of "what needs to be done", thus resulting in scientifically state of the art and managerial doable means to manipulate marketing phenomena through possessing a lead on the direction and extent of influences of main causal factors (e.g., proposing different selling approaches and recommending action-oriented marketing communication strategies). The build-up nature of these four levels of marketing knowledge should be highlighted indicating, for example, that the adoption of a causal research design calls for addressing the other two lower-order questions.

Therefore, it can be argued that the more marketing researchers aim to tackle the higher levels of knowledge, the more likely such research efforts will have a multiplicative effect on nil other levels of research-based marketing knowledge (Kortam, 2002).

Knowledge - Based Marketing
Marketing is a holistic managerial and social philosophy which emerged after the Second World War and is mainly concerned with the use of knowledge to understand and satisfy customer needs. Early successes were achieved by firms such us Unilever and Nestle operating as mass marketers. In the 1960's, many of these firms realized that by acquiring and utilizing knowledge about different market segments they could develop and diffuse a broader range of products that are more adapted to meeting need variations throughout the market place (Wind et al., 2002). The core of the marketing concept is customer satisfaction as the foundation of any business (Drucker, 1993).

The increasingly popular and widely-adopted niche-marketing is about focusing upon a very small group of customers and relying on in-depth understanding to provide highly customized goods and/or services (Kohlbacher, 2008). The process is mainly practiced by a growing number of firms. More recently, many marketing organizations have recognized the importance of building long-term customer loyalty which is referred to as relationship marketing. This philosophy is especially popular with Business-to-Business and service sector firms. Effective execution of a relationship marketing strategy necessitates insightful knowledge customers' behavior prior to, during and after the purchase process. Consequently this infrastructural role of knowledge has fed to the introduction of knowledge-based marketing tools such Customer Relationship Management (CRM) systems with a view toward supporting relationship marketing applications (Doyle, 2004; Clmston, 2006).

It should be noted that knowledge-based marketing is defined as "marketing strategies that have been based on the greater understanding gained from the existing marketing knowledge" (Cader, 2007, P47).

The vast majority of research on knowledge management focuses on information technology while missing out on the uses of knowledge for management purposes (Stewart 2006). In differentiation from the technological orientation of most research work on knowledge management, on the functional marketing level, knowledge-based marketing shows how knowledge can be utilized to underpin and enhance the marketing management philosophy (Chaston, 2006; Kohlbacher, 2008). Knowledge-based marketing is a new paradigm shift in marketing theory that seeks to introduce marketing thought to knowledge management and electronic business and how they increasingly exhibit stronger impact on marketing academia and practice (Chaston, 2006). As was mentioned in previous sections the
objective of this paper is to develop a conceptual framework of the knowledge-based marketing reflecting the creation of the intellectual capital assets. Intellectual marketing capital refers to the postulate that knowledge is the new asset that largely determines the market value of companies (Anonymous, 2005).

Thus, it can be argued that there is adequate ground to build a conceptual framework that aims to employ the theory of knowledge-based marketing to create and maintain knowledge in the form of intellectual capital assets to augment the accomplishment of pressing marketing mandates and their prescribed methodologies. It should be noted that the "important aspect of the knowledge-based theory of the firm is that the source of competitive advantage resides in the application of the knowledge itself" (Alavi & Leidner, 2001, P122).

Exploratory Evidence

Valuable insights can be obtained from a qualitative exploratory study in the Higher Education Market in Egypt as an example of a professional service. Taking into consideration that the results of the exploratory work cannot lead to conclusive findings hence an empirical research needed to arrive to conclusive findings in a later stage.

Context of the Exploratory Work

University Education in Egypt started in 1908 by the inauguration of Cairo University as a part of the national drive for renaissance and sovereignty. This was followed by founding the American University in Cairo (AUC) as the first private and international university in Egypt. Consequently, Cairo University assumed the role of a "mother" university through giving birth to other universities throughout creation stages which has delivered the universities of Alexandria in 1942, Ain Shams in 1950 and Assiut in 1952. The introduction and subsequent expansion of free university education with a view toward securing easy access and availability of higher education to all social classes has led to establishing eight public universities over the 1950's up to 1976.

The year 1996 witnessed the outset of national private universities with four Egyptian universities. Contemporarily, the structure of university education in Egypt is composed of 17 public universities and an almost equivalent number of private universities which is almost 16 universities. The Egyptian universities industry architecture can be dichotomized from a market perspective into four main categories:

• Egyptian old and established Greater-Cairo based and provincial public universities (almost 12 universities).
• Egyptian new public universities that originated as provincial branches of older and are still in the stages of further growth and integration (almost 5 universities).
• Egyptian private universities which includes more than 12 universities.
• Foreign universities with international affiliations and sponsorships.

It is well expected that due to escalating demand for all kinds and brands of university education, the number of universities will surge to 60 universities by 2015. The main demand drivers for university education in Egypt today are internationalization, accreditation, service quality, career potential, proximity, fee categories, perceived image and available degree programs (Shattock, 1995; Scott, 1998; Smith & Ennew, 2000; Mourad, 2010). Important supply factors include leadership, staff, programs and curricula, administration, alumni, physical facilities, research grants, governance, entry requirements, students' unions and extra curriculum activities (Scott, 1998; Smith & Ennew, 2000; Mourad, 2010).

The most demanded areas of university education are medicine, pharmacy, engineering, business, English language, law, mass communications and computer science. A growing number of Egyptian public and private universities are introducing new intermit totally recognized world class undergraduate and postgraduate programs either in foreign languages (mainly English and occasionally French) or through joint collaboration with reputable international universities (mainly American, British, German and French). Egyptian universities are adopting policies for encouraging international research publications and community services activities by their members of staff. The Egyptian university industry is widely regarded as the regional higher education market leader attracting increasingly larger numbers of international students from Arab Gulf, North African, Eastern European, other African, Asian, Western European and North American countries respectively who are seeking a competitive degree programs, a cross-cultural exposure and enrichment, or to pursue archaeological/historical/linguistic and religious interests. Most international students join postgraduate rather than undergraduate programs at Egyptian universities with accelerating rates for both levels of university education especially since 2001.

Structure of Exploratory Work

The objective of the research is to help in developing a conceptual framework of knowledge based marketing with special focus on the Higher
Education marketing. This is done through a comprehensive literature review in conjunction with two phases of exploratory studies. The first phase includes ten in-depth interviews with university policy makers, entrepreneurs and marketers that represent the institutional role in the proposed framework. The second phase includes ten in-depth interviews with managers responsible for designing and running the IT-Based knowledge management systems to represent the technical role in the proposed framework.

Analysis of the Exploratory Work

Only limited number of the respondent organizations practice knowledge-based marketing. This is due to the fact that not all the Higher Education institutions are customer-centric. The main outcomes of this exploratory qualitative research can be highlighted in a number of points.

First, Egyptian universities aim to demonstrate a unique experience in capitalizing on advanced information technology marketing applications to accomplish its strategic internationalization agenda in the area of making the university a cosmopolitan institution.

Second, over the last decade, Egyptian universities have made a strategic decision to respond proactively to the rapidly evolving realities of the global higher education market. This strategic choice was made in pursuit of the their thrusting drive to brand/re-brand and launch/re-launch themselves as world class leading providers of a comprehensive higher education package embracing globally-recognized research, education and community service for their target stakeholders on the national, regional and international levels.

Third, the major change agents of global higher education environment that are deliberately considered by Egyptian universities leaders in their strategic initiative emphasized globalization of higher education markets, deregulation of the higher education industry, drastic changes in higher education's customer bases and the growing role of digital information technology in the creation and sustenance of universities' competitiveness.

Fourth, Egyptian universities decided to strategically adapt to these agents through devising a market orientation philosophy with a view toward branding each university for sustainable global competitiveness.

Fifth, the competitiveness mandate Egyptian universities are committed to deliver and held accountable to fulfill, necessitated the use of all available state of-the-art market-oriented information technologies. For instance, one of the main strategic initiatives in this regard designed and implemented by International Students Bureau (ISB) at Cairo University is an integrated IT Based Customer Relationship Management (CRM) system as a vehicle for applying a relationship marketing approach for tackling the regional and other global higher education markets. The view of ISB that information technology should support relationship marketing between Cairo University and selected international stakeholders, i.e., students' market makers entities on individual students and entities.

The paper describes how IT-based CRM is used by ISB to define the processes of creating and maintaining relationships with students and market-makers' entities and that CRM is used as a holistic IT-based technology to identify, attract, differentiate and retain international students and other client entities. The paper concludes by making the argument that IT-Based CRM as adopted by ISB at Cairo University involves more than simply listening to international students or providing better programs and other student care services. For Cairo University ISB, applying an integrated IT-Based CRM implies integrating the university's entire value chain to create students' values at every step and synergy among steps either through increased benefits and/or lowered costs. Such ideology of IT applications for students' care at universities was found to result in higher strategic returns through increased business from a university's international students' base (Kamel et al., 2008).

Conceptual Framework

Marketing managers gather and communicate knowledge for decision making purposes. Hence, marketing knowledge has become a very important organizational resource due to deregulation of industries, globalization of markets and drastic changes in customer bases in the information revolution age. Marketing knowledge has also become an economic factor of production as basis for competition by knowing more through gathering and using marketing information intelligently in a knowledge-based and market-driven economy.

Using knowledge-based marketing as a framework for creating and sustaining intellectual marketing capital in Egyptian universities involves the identification and analysis of available and required marketing knowledge, and the subsequent planning and control of actions to develop marketing knowledge assets so as to fulfill organizational marketing objectives (Atevi & Feleidner, 2001).

Figure (1) depicts the flow process for generating market information and its proposed transformation into intellectual marketing capital within a knowledge-based marketing system as a
holistic management context and framework. Knowledge-based marketing principles should be devised first to set an integrated system for turning all marketing information into intellectual marketing capital through committing all necessary investments in necessary people ware, hardware and software to create, sustain and perpetuate such capital. This marketing knowledge management initiative should lead to designing, enacting and maintaining necessary governance and marketing information systems mechanisms to manage the designated and configured intellectual marketing system. Once a balanced portfolio of the various levels of marketing knowledge is produced by the four main drivers of marketing knowledge creation and sharing stemming from marketing research, economy knowledge structures, empowered and capable human knowledge creators and adopted modes of information technology, that marketing knowledge would be the main fuel to function the knowledge-based marketing system to turn this knowledge into required formats of intellectual marketing assets for purposes of capitalization, maintenance and incorporation into the broader knowledge management and organizational learning systems of the university.

![Figure (1): Conceptual Framework](image-url)
Marketing knowledge assets are all the knowledge regarding markets, competitors, environmental contexts, products, technologies, resources, culture, skills, systems that an organization owns or controls to enable it to achieve its marketing objectives.

In terms of strategic payoffs, this paper argues as a conclusive output that that devising the underlying rationale of knowledge-based marketing as a vehicle for creating and sustaining intellectual marketing capital in Egyptian universities should be expected to lead to the following six strategic marketing rewards, which can be subsequently formulated as testable hypotheses: 1) leveraging marketing value added across the value chain of Egyptian universities through synergy with other functional areas, 2) enhancing core marketing competencies of Egyptian universities, 3) facilitating niche marketing strategies of Egyptian universities, 4) delivering knowledge-intensive services by Egyptian universities, 5) enacting alliances and partnerships between Egyptian universities and their various stakeholders and 6) enabling cost leadership by Egyptian universities in target market segments.

Research Questions

The developed research questions can be tested on the Higher Education Marketing to study the influence of any of the marketplace variables and measuring marketing knowledge application in terms of achieving the market objectives in terms of market share, brand awareness, and customer satisfaction. The main research question includes the following:

• What conditions facilitate knowledge creation within the Higher Education Institutions?
• Do certain Higher Education Institutions' cultures foster knowledge creation?
• How can knowledge be effectively transferred among the Higher Education Institutions?
• How can Higher Education Institutions encourage application of knowledge that is made available?

Conclusions and Managerial Implications

The literature review revealed the complexity nature of the organizational knowledge based marketing as knowledge could be tacit or explicit, etc. In addition, it includes interdependent process of knowledge creation and application (Alavi & Leidner, 2001). It is argued by this paper that one of the most sensitive areas to reflect this impact is how intellectual marketing capital is created and sustained with special reference to Egyptian universities.

A number of conclusions ought to be drawn on the above discussion and analysis in order to enact knowledge-based marketing concepts and tools to create and sustain intellectual marketing capital in Egyptian universities.

First, a university may never fully realize what marketing knowledge it possesses because it is dispersed and thus resides across a wide frontier of university activities and boundaries. There must be also a motivation to integrate and share marketing knowledge through allocation of specialized and dedicated knowledge workers for creating and sustaining intellectual marketing capital and making it an integral part of the accountability system for every member of the university. In other words, since it is difficult to integrate marketing knowledge, university employees should be motivated to record, share and use marketing knowledge gained in customer contact settings. Effective motivators include conductive university's organizational culture and knowledge performance-related reward systems (Anonymous, 2005).

Second, the creation and sustenance of intellectual marketing capital through knowledge-based marketing in universities take place through the recognition of marketing knowledge-related business outcomes in conjunction with identification and development of formal and informal marketing knowledge networks within the university.

Third, managing marketing knowledge as intellectual capital in universities necessitates: 1) building organizational marketing memory for the university through documentation and artificial intelligence, 2) attracting, retaining and continuously developing creators of marketing knowledge across all university's systems and activities, 3) Restoring a marketing culture across all university's strategic business units that encourages entrepreneurship, innovation and organizational learning (Morgan, 1996; Starkey et al., 2005).

Finally, future research is needed to move beyond the existing limited literature on managing marketing knowledge within the contextual boundaries of universities as higher education institutions operating within its highly competitive market place. The focus should be in facilitating knowledge creation with special reference to creating new marketing knowledge platforms, providing new logical designs for marketing information systems, proposing new governance mechanisms for building and sustaining intellectual marketing capital and devising innovative methodologies for creating various levels of marketing knowledge through capitalizing on newly emerging information technologies.

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References
Galliers, R. & Leidner, D. (Editors) (2003), Strategic Information Management: Challenges and Strategies in Managing Information Systems, Amsterdam: ELSEVIER - BUTTERWORTH HEINEMANN.

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