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THE FLOW OF KNOWLEDGE MANAGEMENT IN THE BANKING INDUSTRY IN THE KINGDOM OF SAUDI ARABIA: HOFSTEDE ANALYSIS OF THE CULTURAL CONSTRAINTS

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ABSTRACT

This purpose of this research paper is to investigate the present literature related to Knowledge Management (KM) and the relationship between culture and KM. It explains the cultural constraints in the Kingdom of Saudi Arabia (KSA) that may diminish the flow of KM within the banking industry. KM is still in the evolving stage in the Gulf Countries (GC), especially in KSA. The banking industry needs a new framework that encourages the flow of KM within the banks. There are some barriers that KM faces within the banks, such as lack of learning, lack of technology, and lack of leadership. KM needs a provocative environment that inspires the management and individuals to inherit the knowledge, Knowledge Transfer (KT), sharing, transferring, and collaborations within the banks.

Keywords: Knowledge Management, Banking in Saudi Arabia, Government Organization, Organizational Culture Theory, Hofstede Analysis, Cultural Constraints

INTRODUCTION

Saudi Arabia is considered a developing country and is the largest of the Gulf Countries (GC), which also include Bahrain, Kuwait, Oman, Qatar, and United Arab Emirates (UAE). Saudi Arabia is also known as the Kingdom of Saudi Arabia (KSA). The population of Saudi Arabia in 2015 was 31,540,000 million people (Population Pyramid, 2015). In addition, Saudi Arabia is one of the largest exporters of oil in the world. The Kingdom has 22 government ministries, including Foreign Affairs, Interior, Justice, Finance, Economy and Planning, Defense and Aviation, Culture and Information, Education, Higher Education, Health, Commerce and Industry, Petroleum and Minerals, Agriculture, Labor, Social Affairs, Municipal and Rural Affairs, Civil Service, Pilgrimage, Transport, and Water and Electricity (ALHussain, 2012).

According to the Saudi Arabian Monetary Agency (SAMA), there are 12 banks in KSA. There are The National Commercial Bank, The Saudi British Bank, Saudi Investment Bank, Alinma Bank, Banque Saudi Fransi, Riyadh Bank, Samba Financial Group (Samba), Saudi Hollandi Bank, Al Rajhi Bank, Arab National Bank, Al Bilad Bank, and Al Jazira Bank (Saudi Banks). SAMA, established in 1952, is the central bank of Saudi Arabia and has been authorized to perform many functions regarding rules and regulations (Saudi Arabian Monetary Agency).

The Knowledge Management (KM) infrastructure in the banking industry in KSA is still in the evolving stage. Banks should acknowledge KM and its advantages to increase competitive advantage. Competitive advantage is "an advantage that a firm has over its competitors, allowing it to generate greater sales or margins and/or retain more customers than its competition" (Investopedia, 2007, para. 1). KM should be in parallel with the business process to "capture, maintain, and reuse the key information, and arbitrates the strategic knowledge assets that improve business performance" (AlAmmary & Fung, 2008, p. 75; Cedar, 2003). KSA's issue in the banking industry concerns how culture shapes the flow of KM and communication in the banks. Saudi culture is formed according to Islamic legislation and some traditional habits of the people. The culture may initiate constraints that prevent the flow of knowledge inside and outside the banking industry.

This paper presents a literature review to provide a glimpse of the cultural restrictions that diminish the flow of KM in the banking industry in KSA. The paper includes five sections: (1) the interpretation of knowledge, (2) the

Hofstede cultural dimensions in Saudi banking industry, (3) knowledge and organizational theory, (4) KM in banks, and finally (5) KM barriers.

LITERATURE REVIEW

The Interpretation of Knowledge

To understand KM, knowledge, data, and information will be introduced to give the reader an idea of knowledge and KM in a glimpse. Davenport and Prusak (2000) stated, "knowledge is neither data nor information" (p. 1). Knowledge is something more than just information; Davenport and Prusak defined knowledge as a "fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating experiences and information" (p. 5). Therefore, past experience and information create future and present knowledge. Organization data is "a structured record of transactions" (Davenport & Prusak, 2000, p. 2) and the vital element to create information (Davenport & Prusak, 2000). According to Davenport and Prusak (2000), Information is "data that makes a difference" (p. 3), and it has "meaning" (p. 5). This does not mean that data is not important, but that it does not have meaning by itself and requires processing. Knowledge and information can be converted in both ways: "information is converted to knowledge once it is processed in the mind of individuals and knowledge become information once it is articulated and presented in the form of text, graphics, words or other symbolic forms" (Alavi & Leidner, 2001, p. 109). Knowledge is in the individual's mind and is the total experiences and information that people have been processing throughout and presently in their life (Alavi & Leidner, 2001).

Polanyi (2009) differentiated knowledge and divided it into tacit and explicit knowledge. Tacit knowledge is when "we can know more than we can tell" (Polanyi, 2009, p. 4), which means it is tangible, quantified, and can be documented and represented (Nonaka & Takeuchi, 1995; Population Pyramid, 2015). Tacit knowledge is personal. It concerns individuals in which their personality and skills are hard to represent or codify. Polanyi argued the practical part of knowledge is "knowing how" and "knowing what." Hence, organizations work to emphasize the two parts to know how to do the work and what work is going to be done. Nonaka and Takeuchi (1995) argued that knowledge is information and stated, "knowledge means wisdom that is acquired from the perspective of the entire personality" (p. 29). However, this paper does not focus on this definition of knowledge but examines Davenport and Prusak's definition of knowledge. Knowledge is learned by sharing the correct information among individuals and groups, and culture is essential to the learning process. Nonaka and Takeuchi emphasized, "the importance of learning from direct experience (…) learn with their minds and bodies" (p. 10). That is how Japanese managers create and innovate, by supporting the learning process. The authors also mentioned this practice changed the way of thinking, where thinking as whole instead of partial thinking is more beneficial, which they call it "system thinking" (p. 10). Knowledge is all about beliefs. Nonaka and Takeuchi (1995) stated, "knowledge means wisdom that is acquired from the perspective of the entire personality" (p. 29). Nonaka and Takeuchi also argued, "knowledge, like information, is about meaning" (p. 58). Therefore, knowledge does not stand-alone because culture is such a crucial component in it.

Tacit knowledge concerns "know how" and "know what" and is more personal and hard to express (David & Fahey, 2000). Contrarily, explicit knowledge can be documented, shared, and quantified (David & Fahey, 2000). David and Fahey (2000) divided knowledge into three types: human, social, and structured. Human knowledge is "what individuals know or know how to do" (David & Fahey, 2000, p. 114), and it is combined with tacit and explicit knowledge. Social knowledge is the knowledge that exists within the groups and individuals' interactions, which is a form of a tacit knowledge (David & Fahey, 2000). Structured knowledge is "knowledge embedded in an organization's systems, processes, tools, and routines," which is also a form of explicit knowledge (David & Fahey, 2000, p. 114). David and Fahey stated the difference between human and social knowledge, which is more about human's know-how; whereas a structured knowledge is about "organizational resource" (David & Fahey, 2000, p. 114).

The Hofstede Cultural Dimensions in Saudi Banking Industry

Culture is vital part of knowledge, which means the effects of culture cannot be ignored. Hofstede and Hofstede (2010) defined culture as "the unwritten rules (…) or collective programming of mind that distinguishes the members of one group or category of people from another" (Hofstede & Hofstede, 2010, p. 516). However, Geertz (1973) stated that culture "is composed of psychological structure by means of which individuals or groups of individuals guide their behavior. (…) it is one has to know or believe in order to operate in a manner acceptable to its members" (Geertz, 1973, p. 11). Geertz's definition proves the theory of knowledge and that it is related to culture, meaning individuals should know or believe that acting properly in the group or in the banks is beneficial. Because both knowledge and culture influence each other, banks should have their own culture to shape their knowledge and to work successfully.

KSA is a country that is entirely dependent on Islamic legislation, called '*Shari'ah,'* and on culture. The culture of KSA is shaped by Islamic concepts, as is the banking industry. Shari'ah is derived from the Quran and the prophet Mohammed Sunna. Shari'ah is the Islamic legislation that Saudi applies to all peoples' lives and organizations. However, the culture in Saudi is too complicated that it prevents natural communication among individuals in organizations, especially in banks. Bank buildings in KSA are separated into two separate buildings, one for men and the other for women. The flow of information and communication in the banks is limited on a daily basis. It takes a long time to transfer information from the women's branch to the men's branch. For example, to verify paperwork on a daily basis, much time is needed to move the paper from the women's department to the other building. This process decreases the efficiency within the Saudi banks, as it is the only country that has this regulation. Women work in their own bank branch for customers who are only women. Women must wait a long time at the bank just to make a regular deposit, transfer, and order a check due to the lack of sharing information and culture rules that result in the absence of knowledge of the bank itself. Separating the banks into different departments, where each one serves either men or women, leads to insufficient KM and a lack of sharing and transferring knowledge within the banks.

Until this year (2016), the general idea was that women were supposed to be housewives and take care of children and the home. Even though women are successful in education and work, there still exists an inequality in Saudi society between men and women. For example, women are prohibited from driving in Saudi Arabia; they cannot travel without permission of their Mahram; and they cannot do governmental paperwork without Mahram. Mahram is the main guardian of the woman, whom is a father, husband, or brother (i.e., if the father is dead and she is not married). There are also some places, such as stores, that do not allow a woman to enter without Mahram. Even though the education is improved for both men and women, there is still a gap between both genders in the work environment. Some men prefer their wives to work in female-only environments as teachers, for example, instead of working in a mixed gender business. The separated work environment causes problems like transferring or sharing incorrect knowledge or not even transferring knowledge at all. Most work environments in the KSA are separate in buildings but not in work. For example, the women's branch at the bank cannot do their work without returning it back to the men's branch to complete the process. In the Western environment and other Middle East countries, that process is done at the same place with both men and women instead of sending and receiving paperwork from and to the women's branch. Saudi Arabian culture in the banking industry will be analyzed by providing the masculine and feminine dimensions using Hofstede dimensions of national culture (see Table 1).

Table 1. Hofstede Cultural Dimensions Analysis in Saudi Arabia

Feminine	Masculine
• Females only workplace in banks • Women's branch dependent on men's branch • Female manager (two managers at the same bank but a male for male's branch and a female for female's branch) • Paperwork must go to men's branch to be approved	• Males only workplace in banks • Independent • Approve women's paperwork • Male manager (two managers at the same bank but a male for male's branch and a female for female's branch) • No need for female's branch to approve their paperwork

In the banking industry, there are two branches of the same bank in the same building but a separate one for women and the other for men. Women are dependent on men to approve the process within the female-only branch. These types of dominant feminine or masculine environments occur in almost all businesses in Saudi. This kind of restriction might be an unhealthy non-normal situation, which is the opposite in the West reign. Women and men should work together to produce a normal healthy environment that encourages sharing, transferring, and creating knowledge.

Knowledge and Organizational Culture Theory

To make an effective KM, there needs to be an organizational culture that shapes the base of the organization (Gold & Arvind Malhotra, 2001). Individuals in the organization create culture, which can only be shaped via human interactions (Gold & Arvind Malhotra, 2001). The previous argument contends that knowledge and culture affect organizational culture theory, which depends on three levels of culture: (1) artifact, (2) beliefs and values, and (3) assumptions (Schein, 2006) (see Figure 1). The artifact level encompasses everything that can be seen and heard in the organization environment, including tangible items (Schein, 2006). Schein argued that individuals influence others in an organization on what they believe. For example, the introduction of a new task in a group may result in an individual suggesting an assumption or solution that may expose someone's belief has the most effective influence on them (Schein, 2006). The last element is assumption, or as defined by Kluckhohn and Strodtbeck (1961), "preferred solution among several basic alternatives, but all the alternatives are still visible in the culture, and any given member of the culture could, from time to time, behave according to variant as well as dominant orientations" (as cited in Schein, 2006, p. 30-31). To work inside a group and to become a member of the group, you must share a culture, which further results in the sharing of knowledge.

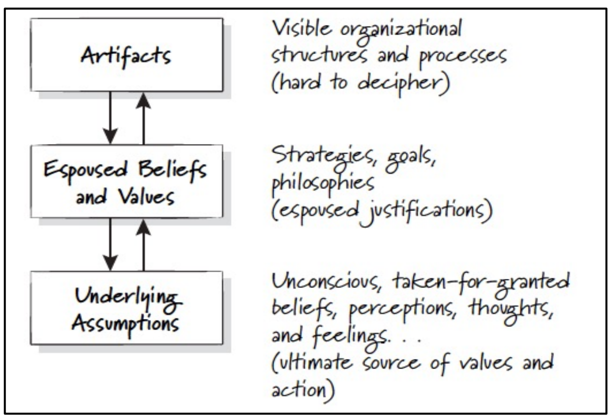

Figure 1. Organizational Culture and Leadership (Schein, 2006)

Knowledge is the key for developing skills. To share knowledge within an organization's environment, the member should acquire their culture. The artifact "tangible" element in the organization is part of the culture, the employees' apparel, how the employees customize their offices, and how they talk to each other. All of these simple daily things are elements of culture. For example, Zappos is a famous company that has their own culture, and the secret of their success is based on that the company believes in itself and in their employees. Zappos respects their customers, delivers happiness, and "delivers WOW through service" (Zappos).

Moreover, there is a link between KM and organizational culture. According to Zheng, Yang, and McLean (2010), "(…) knowledge management fully mediates the impact of organizational culture on organizational effectiveness, and partially mediates the impact of organizational structure and strategy on organizational effectiveness" (p. 763). Organizational culture theory argues that an organization has unique characteristics that distinguish one from another (Zheng et al., 2010). The organization will have successful competitive advantages due to the crucial role that KM has in the organization, where KM connects organizational context and strategy with organizational effectiveness (Zheng et al., 2010).

In the banking industry, organizational culture theory is applied to KM to have a sustainable environment. According to Thakor (2015), culture is a vital element in the banks and in is the whole organization:

> A bank's culture must support the execution of its growth strategy, so that the culture affects all aspects of decision-making in the bank. That is, culture is much more than a statement about ethical behavior in banks – it is about the overall credit culture of the bank; how employees are hired, rewarded and fired; how resources are allocated; and how risks and opportunities are managed. (p. 18)

If the banking industry comprehends culture properly, the bank's strategy, knowledge, and KM will be more efficient as it is all based on culture as the major element.

Knowledge Management in Banks

The authors of this paper chose KM definition by Quintas, Lefrere and Jones (1997) because it suites the banking industry. Quintas et al. (1997) defined KM as, "the process of continually managing knowledge of all kinds to meet existing and emerging needs, to identify and exploit existing and acquired knowledge assets and to develop new opportunities" (p. 387). Quintas also stated that KM is essential in an organization "to implement knowledge strategies with the help of all relevant parties within an organization" (p. 387). KM in the banking industry will support the flow of information among individuals in the banks, one distinction of KM is "programmed must have coherence across a number of dimensions, including organizational structure and culture, people aspects, processes, and technology" (p. 387). Rastogi (2000) defined KM as "a systematic and integrative process of coordinating organization-wide in pursuit of major organizational goals" (p. 40).

Banks should be "aware of its knowledge, individually and collectively, and to shape itself so that it makes the most effective and efficient use of the knowledge it has or can obtain" (Bennet & Bennet, 2004, p. 440). Acquiring the right KM in the banking industry will provide opportunities to learn and develop new practices. In addition, managing KM within the banks will enhance communication and collaboration among individuals (Alavi, Kayworth & Leidner, 2005), while lack of knowledge might lead to a failure, such as the 2007-2009 crisis (Holland, 2010). According to Holland (2010), the 2007-2009 crisis resulted because "[b]oard directors and top management in the failing banks did not understand that their rapid growth models, their emphasis on a sales and trading culture, and growth based incentive and pay schemes, all led to the development of a very risky (…) products" (p. 90). Thus, the top management should be aware of the previous problems and employ previous knowledge to elude future problems (Holland, 2010). KM without communication is not useful, so communication among top management and employees within the banks is vital (Holland, 2010). For example, the "talk" and the "communication" among employees during lunch breaks or at the cafeteria inside the banks is a way to communicate and share information. Such communication leads to a strong personal collaboration and knowledge transfer between the employees, prompting the employees to collaborate, learn, and share information that will help retain information among individuals within the organization (Alavi et al., 2005). KM values are an important basis of any organization in order to improve and succeed in their working journey. For example, Zappos highlights value as one of three elements that influences and enhances the company's culture.

There are many advantages of having KM in the banking industry, specifically in KSA, to share knowledge and experience with the rest of the organization. Making knowledge available to the men's section and not the women's will undeniably lead to a failure and dead point between the two sections (Barnes & Milton, 2015). Table 2 displays a suggested framework for Saudi banks, adapted from a NASA framework model in Barnes and Milton (2015), to enhance KM within the organization and aid in sharing, transferring, and collaboration inside the banks. The model includes four core elements: people, process, technology, and supporting activities (Barnes & Milton, 2015). Investing in these four elements may be beneficial to the banking industry. It should be noted that these points are just suggestions, and the success of a bank may be more or less dependent on the bank's needs and investment.

Table 2. Saudi Banks KM Suggested Framework (Barnes & Milton, 2015)

<table>
<tr><th colspan="5">Sharing and Using Knowledge</th></tr>
<tr><th colspan="2">People</th><th colspan="2">Process</th><th>Technology</th></tr>
<tr><td colspan="2">Enhance remote collaboration
Reward and recognize knowledge sharing
Encourage storytelling</td><td colspan="2">Enhance knowledge capture
Manage information</td><td>Enhance system integration and data mining
Enhance ATM machine system
Enhance technology and authentication in online banking website</td></tr>
<tr><th colspan="5">Supporting Activities</th></tr>
<tr><td>Education and Training</td><td>IT Infrastructure</td><td>Integrated financial management</td><td>Human Resources</td><td>Security</td></tr>
</table>

Knowledge Management Barriers

Developing countries as well as some developed countries face barriers for Knowledge Management (KM). Developing countries include Kingdom of Saudi Arabia (KSA), Kuwait, and Oman, and developed countries are the United States of America (USA) and the United Kingdom (UK).

Leinster mentioned some of KM barriers in the USA, which is primarily the fear of losing control in which the managers prefer to exert control over their employees. At times, banks need to have guidelines or limits to the amount of control because control is not always an effective strategy to perform work successfully. Involving the employees is the key to guide them and listen to them in order to move the banks in the right direction. Moreover, control is not just a barrier, it is one of the strongest cultural element of banks (Leistner, 2012). Leinster emphasized, "more involvement of all employees (…) help with [banking] sustainability" (Leistner, 2012, p. 98). The second barrier is unlearning, or in other words, forgetting what you have learned to learn to accept new knowledge. This suggests that people continue to retain knowledge and apply it to every situation without trying to learn new knowledge. Applying the same knowledge again and again is not always appropriate to every situation or problem that occurs in the banks. In addition, Holland conducted a study regarding banks and revealed crisis in the UK, which further highlights the importance of knowledge and learning from failure. Holland argued that the banks should be aware of knowledge problems that face their organization, regarding "risk management." Banks should be concerned with knowledge and finding strategies to learn new knowledge without difficulty (Holland, 2010). Holland stated, "active learning through a change to create a more informed, knowledgeable, robust, responsive banking and market system" (p. 130). The solution to knowledge problems is active learning in order to enhance the knowledge inside the bank. ALHussain (2012) cited Gurteen who identified some KM barriers, such as lack of knowledge sharing among within the organization, lack of time, poor information technology (IT) systems, bureaucracy, and resistance to change from top management. These barriers are organization and management driven. In addition, individuals can prevent KT due to fear, lack of confidence, pressure, and lack of communication (Lugger & Kraus, 2001; ALHussain, 2012), while adding technology to the organization may also hinder the flow of KM. Thus, organizations should be able to adapt and implement the appropriate type of technology to improve KM (ALHussain, 2012).

ALHussain (2012), in his dissertation titled "*Barriers to knowledge management in Saudi Arabia,*" identified and divided the barriers to KM in KSA into four dimensions: (1) 19 organization barriers, (2) 24 technology barriers, (3) 32 leadership barriers, and (4) 22 learning barriers (ALHussain, 2012). According to Gabriel (1994), as cited in ALHussain (2012), some of the KM barriers are organizational and management driven, such as "ignorance, absence of absorptive capacity, lack of pre-existing relationships, and lack of motivation" (ALHussain, 2012, p. 35). ALHussain further emphasized that these KM barriers are the major organization barriers in KSA, as verified by experts. ALHussain identified the categories of the KM barriers as the follows (ALHussain, 2012):

1. Learning:
    a. Lack of sharing knowledge
    b. Lack of educated specialists
    c. Absence of culture
    d. Lack of training
2. Leadership:
    a. Lack of experience in KM
    b. Lack of collaboration from management
    c. Weak methodologies that support KM
    d. No support for KM sharing standards and procedures
3. Technology:
    a. Lack of communication tools
    b. Lack of human resource to manage technology
    c. Outdated information
    d. Inadequate technological resource to archive knowledge
4. Organization:
    a. The absence of organizational communication
    b. Lack of culture
    c. The absence of training
    d. Lack of trust within the organization

When the KM barriers are known, the banks should avoid these barriers by working on solving these issues. For example, the banking industry should be more open and provide a trusted environment to their employees (Gold & Arvind Malhotra, 2001). Banks should encourage learning, sharing, strength the leadership within the organization, encourage communication, training in IT, and creating their own culture.

RESULTS AND IMPLICATIONS

This paper examined literature on knowledge and KM from different perspectives in the banking industry. In addition, it analyzed the Saudi bank environment by applying Hofstede cultural dimensions and further explained the separated female and male sides that interfere with the flow of KT and KM in the banks. Moreover, it discussed how men are dominant in Saudi culture, while women must depend on men to approve paperwork. KM barriers are also revealed, which also inhibit the flow of KT in the Saudi banks. Applying organizational culture helps to increase the efficiency of KM in the banks. As a result, this research determined that knowledge is primarily shaped by culture and requires information and effective transpiring and transferring of communication. Moreover, knowledge is combination of information and communication which effective only within the culture.

The Shannon and Weaver model of communications reveals that information is transferred among communication media until it is received. If anything interrupts this communication, it will make the information blur to the other side (person), i.e., Chinese whispers. This causes the information to have too much noise and impurity, resulting the knowledge to be inefficient. Since knowledge is experience that is created over time and the culture is a crucial element in it, then knowledge needs to exhibit clear strong culture, information, and communication (see Figure 2). Thus, knowledge will be efficient and transferable when both information and communication existed within the culture of the organization.

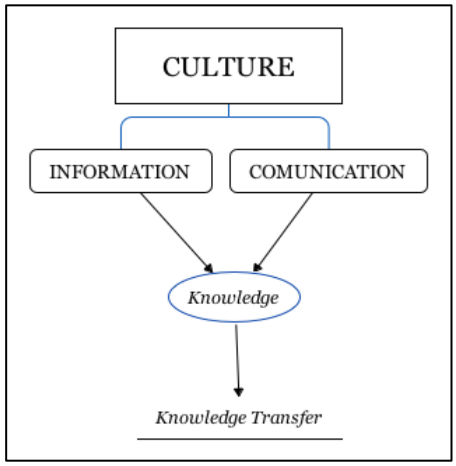

Figure 2. The Relationship between Culture, Information, Communication, Knowledge, and KT

Figure 2 presents the relationship between the four elements: information, communication, knowledge, and KT. The banks will see success by applying an efficient KM plan in an appropriate way based on the framework model mentioned before (see Table 2) and by ensuring that the flow of KM is smooth and cooperated among the employees.

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