

Socio-Organisational Approach to Online Banking Transaction Risk Communication inside Banks in Jordan

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Abstract: This study aims to investigate the innovation of Online Banking Transaction (OBT) risk communication issues inside banks in Jordan from the socio-organisational point-of-view through studying the effects of national and organisational cultures on the risk communication process. Although risk communication issue has been approved to be one of the success reasons of Online Banking (OB) usage, the risk communication approaches that have been developed during past years tend to offer narrow technically oriented solutions, and they have not paid enough attention to the social aspects of risks and the informal structures of organizations. Using the previous research findings, this study presents a socio-organisational approach to the OBT risk communication innovation process inside banks in Jordan, which enrich the in depth understanding for practical projects and empirical research contexts.

1. Introduction

Risk communication through Online Banking (OB) has been approved to be one of the success reasons of OB usage, especially in multi-cultural environment banks [21]. OB transaction (OBT) is susceptible to high potential risks, such as losing money, identity theft, and phishing. An important part of dealing with such OBT risks is the communication process inside a bank. This study focuses on the OBT innovative risk communication process inside banks in Jordan from the non-technical point of view.

In past years, a number of valuable risk communication innovation approaches has been developed. Researchers tend to offer narrow technically-oriented solutions, and they have not paid enough attention to the social aspects and the informal structures of organizations when dealing with risks. Hence, the assumption of this study is that innovation of OBT risk communication can be efficiently investigated and understood through a systematic and comprehensive study of various social and organizational aspects, particularly national and organisational cultures. In other words, even if top management, and IT management are using a variety of risk communication methods, techniques, tools, and strategies and procedures, managers might not be using them efficiently in the OBT risk communication process without considering the effect of the cultural aspects.

In Jordan, OBT risk communication process would be different for local (i.e. owners and employees are Jordanian) and multi-cultural banks (i.e. owners are not Jordanian and employees are from different countries in addition to Jordanians) due to the difference in organisational culture [20]. Moreover, many banks run their OB services in different countries such as HSBC and Citibank, and they have succeeded in many countries even though they are running in different cultures rather than their own cultures. Hence, this study will shed the light on the multi-cultural banks in Jordan, in addition to the Jordanian banks owned and run.

The following sections introduce the objectives of this study and the methodology used. Also, we provide an overview of OB issues, risk communication, and review the literature of culture on organisational communication innovation in the technology description section. The proposed framework will be discussed in the developments and results section. We also highlight this study's business benefits. Ultimately, the conclusions are presented in the last section.

2. Objectives

This study aims to investigate the innovation of online banking transaction (OBT) risk communication issue inside banks in Jordan from the socio-organisational point of view through studying the effects of national and organisational cultures on the risk communication process. The following are the objectives of this study:

1. To investigate how different cultural aspects (i.e. national and organisational cultures) affect OBT risk communication process.
2. To identify the main factors that play major roles in the success of OBT risk communication process inside a bank.

3. Methodology

This study uses a deductive approach through logical relationships among constructs in the theoretical framework and proceeding towards concrete empirical evidence. Quantitative data analysis is used, which seeks to test hypotheses, make prediction, and establish facts.

The hypotheses will be measured by using questionnaires. The sample will be IT groups and managers in four banks in Jordan; two Jordanian owned and run banks (i.e. A and B), and two multi-cultural banks (i.e. C and D). The names of banks are defined as alphabets for their information and findings privacy. The data collection involves distributing a questionnaire to a total of 250 employees.

Technique like Partial Least Square (PLS) will be used to analyse and test the model as it provides good analysis of complicated data set and multiple independent and dependant variables [6]. First, the scale psychometric characteristics will be tested (discriminant validity and reliability). Second, the causal model will be tested (path coefficients).

4. Technology

While banks' efficiency and competitiveness can be improved by using OB services through cost saving and better customer service and satisfaction, risk implications impede the business [20]. OBT, as a form of OB services, is susceptible to many forms of risk such as losing money, identity theft, and phishing. Although a number of studies have developed some approaches for IT risk management, they have not concentrated or they have ignored the social issue of risks and the informal organisational structure [20].

OB services have been implemented in Jordan since 2000. Millions of dollars have been spent on upgrading OB services. A total of 26 banks are running online banking services in Jordan. 16 local banks and ten are subsidiaries of foreign banks. However, OB usage in Jordan is still very low where only two percent of bank's customers are using OB [2]. In addition, the performance of commercial banks in Jordan has been found to be negatively affected by the use of OB services [2].

The literature for numerous studies, which have been deployed to find out the factors that affect the adoption of OB, shows that these factors can be summarised into four groups: technical factors, organisational factors, cultural factors, and human factors [2]. This study focuses on cultural factors, which have not been fully investigated, especially within the bank and from bank's member's point-of-view.

4.1 - Risk Communication in OBT

Risk communication has a number of definitions depending on the context that is applied such as health context, social context, and political context. Risk communication is believed to be part of risk management as it offers some risk control options along with information that can be used by third-parties such as industry, government, and decision makers on which they base their choices [23]. This research adopts the national research council (NRC) (1989) definition as it covers the essentials for this study:

'Risk communication is an interactive process of exchange of information and opinion among individuals, groups, and institutions. It involves multiple messages about the nature of risk and other messages, not strictly about risk, that express concerns, opinions, or reactions to risk messages or to legal and institutional arrangements for risk management.' [23, p.21]

The definition above represents a comprehensive definition that includes individuals, groups, and institutions in the risk communication process. However, for the purpose of this study, we only talk about exchanging information between individuals and groups inside a bank in the case of OBT risk. This study refers to the communication inside the bank as "organisational communication", and adopts Goldhaber's [14] definition of organisational communication as 'the flow of messages within a network of interdependent relationships'.

4.2 - Culture Impacts on Communication Effectiveness and Innovation

State-of-the-Art: this study argues that both national and organisational cultures in Jordan play significant roles in the effectiveness of OBT risk communication innovation inside banks. In addition, the Jordanian national culture will influence the organisational culture even for a foreign or not local bank.

Social and organisational cultures have been widely referenced in academic literature and have attracted researchers attention for several years. The sense of control that might be provided by the organisational culture is behind that attention. This control can be seen in the way members inside a bank behave and process the information [9]. Social and organisational cultures are no longer considered as an external factors that could affect the inside bank's operations, but rather as a crucial and integral part of innovation [10][21]. Innovations are no longer considered through new technologies only, but rather through new socio-organisational approaches, rules, values, arrangements, and relationships [21].

Koskosas and Massalas [20] argue that strong culture that holds norms and values such as co-ordination and control within the firm, having highly motivated members dedicated to the bank's goals, and increasing member's innovation enhances the bank's performance. However, strong culture is not always the best culture for a bank as it will constrain information sharing and communication process [21]. As an example, creativity and usage will be decreased as the strong organisational culture might not recognise the need for change. Similarly, even if the strong culture bank is willing to change, knowledge sharing and communication become rather sluggish [6].

Many researchers argue that collaborative organisational culture is crucial for effective communication [17][22]. Collaborative culture is positively related to the employee innovative communication when they are expecting more interest on them from their bank, and the opposite is true when they expect less interest [22][25]. The corporate culture has a strong impact on the bank's success as it identifies all parties interacting in the communication process inside and outside the bank [17][19]. In dynamic environments (i.e. technology turbulence), the successful bank employs the cultural norms that enhance and strengthen adaptation and outreach capacity (i.e. innovation or information) [19].

Communication process is a critical success aspect that enables people inside a bank to innovate, share, and exchange information [10], so it is crucial for a bank to provide the

suitable culture for this communication [15]. This communication should be open, accurate, and frequent in order to exchange members' approaches, values, and preferences to problems, which lead to knowledge-based development [8]. The greater the open communication and high quality relationship between managers and other members in a bank, the greater the support, trust, fears of insecurity, and loyalty that will take place [3][25][26].

Alternately, communication in the traditional management philosophy point-of-view, employees' role or competence such as involving in a collaborative communication are believed to be ineffective or weakness in management [17]. As a result, information flow from top management to other members and between members is negatively influenced and leads to weakened communication process inside a bank [25]. This information, in most cases, is necessary information in order for employees to perform their duties [7]. As a result all employees including junior managers were information-poor, and had not given a lot of attention to the information, as it had no value for them [7].

Risk communication however, as a part of organisational communication, is more difficult and complicated than other types of communication, especially when a bank members deal with customer's money and sensitive account details as in the case of OBT. The difficulty of risk communication is not only because of information exchange between the parties involved, but also as a result of exchange with other institutional and cultural contexts where risk messages are formulated, transmuted and embedded [20].

Many factors can play roles in risk communication such as bank's size. In small banks, members, usually, do not have problems in communication which increases the flexibility in managing risks [20]. However, the efficient of risk communication will be attributed to the perception of risk knowledge between the educational IT employees and the clarity in the goal settings [20]. On the other hand, big banks might have very educated and trained IT staff with clear goal settings, but the flexibility of managing risk would be low as a result of slowness in the risk communication process [20]. Moreover, the limited success of risk communication in some banks is due to the insufficient attention that had been paid to the cultures' aspects [20].

This study supports that a corporate culture plays a significant role in the level of OBT risk communication innovation process. However, we would argue that the bank should avoid both too much strong culture (i.e. through harsh discipline and too many procedures) and too much corporate culture (i.e. no discipline applied) [13].

4.3 - Cultural Differences of the Study

Jordan has been chosen to do this study due to its unique location in the Middle East and its significant cultural differences from Western or Eastern cultures. Jordan, as an Arabic country, was considered one of the most complex cultural contexts in the world [1]. Different to Western culture, religion plays a significant role in determining different aspects of social and traditional life [4]. In addition, Jordan, with high readings of power distance (PD) and uncertainty avoidance (UA), is expected to have lower openness for new ideas and innovation [1].

Moreover, some foreign (non-Jordanian) banks are running their businesses in Jordan, which offers a suitable environment for the purpose of this study. Multinational banks working in Jordan offer multi-organisational cultures to study, in addition to the Jordanian organisational culture, all in the single national culture context helps in deep understanding of the effect of national culture in both OBT risk communication innovation and the organisational culture itself.

5. Developments

5.1 - Framework

The aim of this study is to investigate the innovation of OBT risk communication from a non-technical (i.e. cultural) point-of-view inside banks in Jordan. This study adopts a collaborative organisational culture approach for effective OBT risk communication innovation process. Collaborative participation requires a framework that includes productive systemic communication rather than just reproductive mode [15]. This framework needs to optimise differences, interact experience to enable the process of reformation, and focus on the invention of mutual satisfaction of decisions made. Figure 1 represents the study proposed framework. The following sub-sections discuss the constructs of the framework.

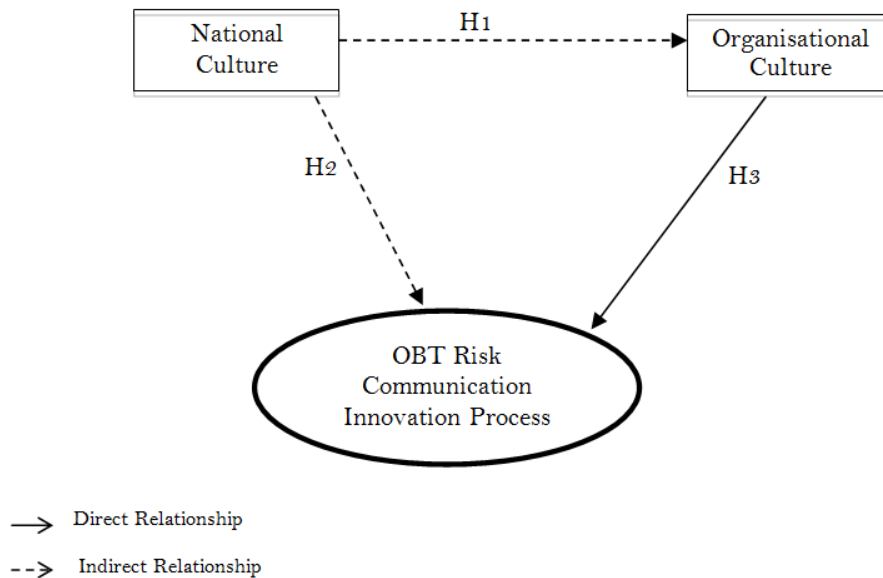


Figure 1: A Proposed Framework

Depending on the literature in the previous section (4) and the following subsections on national culture and organisational culture, we state the following hypotheses:

H1: national culture in Jordan will have a negative and indirect impact on banks' organisational culture.

H2: national culture in Jordan will negatively and indirectly affect the process of OBT risk communication innovation process inside banks at Jordan.

H3: organisational culture will negatively affect the process of OBT risk communication innovation process inside banks at Jordan.

This research adopts Hofstede's dimensions for both national and organisational cultures. The four national dimensions will be investigated: power distance, uncertainty avoidance, masculinity-femininity, and individualism-collectivism. However, power distance and uncertainty avoidance dimensions will be investigated for organisational culture.

5.2 - National Culture

Many definitions have been identified for the term "culture". National culture can be defined as 'the collective programming of the mind which distinguishes the members of one group or category of people from another' [16]. Hofstede's four dimensions have been conceptually defined as follows:

- Power Distance (PD): the extent to which individuals and groups in a specific cultural context accept and expect the unequal power distribution.
- Uncertainty Avoidance (UA): the extent to which individuals or groups of a cultural context feel threatened by unknown situations.
- Individualism vs. Collectivism (IDV): the extent to which the individuals in a cultural context are integrated into groups.
- Masculinity vs. Femininity (MAS): the extent to which gender is signed roles in a cultural context.

Hofstede's dimensions have been heavily investigated through out the literature. Many studies, which had taken place in Arabic context such as Jordan used these dimensions and found that they could expect and measure the customer's attitude towards using web-based applications [4][24][27]. Many studies have studied some of Hofstede's cultural dimensions such as power distance and uncertainty avoidance which, as they argue, are playing a significant role in determining how groups will potentially use new technology [1]. Countries with high readings of these two values are less likely to adopt new ICT as they are expressed with high risk and low information about them [1]. Many studies show that the unsuccessful adoption of Western technologies in the Arabic context is due to national cultural factors miss-fit such that the potential for a lack of congruence is particularly marked in developing countries with non-Western cultures [2].

5.3 - Organisational Culture

Organisational culture can be defined as the values, attitudes, and behaviours that represent an organisations' working environment, vision, and subjective [16].

As mentioned earlier, this research adopts Hofstede's dimensions for both national and organisational cultures. For organisational culture, special focus will be given to power distance and uncertainty avoidance dimensions as the most expecting dimensions [16]. The characteristics of a bank can be summarised depending on the above two dimensions as follows:

Uncertainty Avoidance (UA) and Innovation: different levels of uncertainty avoidance in banks lead to different decisions as a result of development new innovation risks. Banks with low uncertainty avoidance would take more risk to achieve high profits, and use both their innovation or import others. However, high uncertainty avoidance banks would be more conservatives about their decisions with respect to activities and innovations usage, do not take risks easily to innovate, and they are more willing to maintain their current stability of the security services.

Power Distance (PD) and Innovation: organisational culture with high power distance is described by centralised authority, many hierarchical levels, and autocratic leadership. The high power distance banks exercise strong control mechanisms governing internal knowledge activities through procedures, rules, and institutions. This kind of organisational culture will decrease and inhibit member's creativity such as new ICT and technological innovation. However, in the low power distance, banks enhance their members to feel that they should be involved with managers in decision making, and information sharing and communication. This type of bank has a strong tendency to innovate and create.

Hofstede et al. [16] identified four organisational categories depending on power distance (PD) and uncertainty avoidance (UA) dimensions. Figure 2 shows these four organisational categories and the place of Jordan on that diagram.

HUA- LPD (Machine) Germany	HUA- HPD (Pyramid) France Jordan *
LUA- LPD (Market) UK	LUA- HPD (Family) Hong- Kong

Figure 2: Organisational Culture Categories
Source: Hofstede et al. (2010), where L: low and H: high.

The first category at the top left hand side, where the power distance (PD) is low and the uncertainty avoidance (UA) is high can be seen in Germany banks. This category is described with very high organised and well documented procedures for all business details, which looks like "well-oiled machine". The second category at the top right hand side, where PD and UA are both high can be seen in French banks. Those types of banks follow the hierarchical pyramid structures, where all business approvals and decisions should go through the top management at the top of the pyramid. The third category at the bottom left hand side, where both PD and UA are low can be seen in English banks. This category concentrates on getting the job done and all members inside the bank are sharing responsibilities and making decisions. The last category on the right hand side at the bottom can be seen in the far Eastern countries such as Hong-Kong. This category is described by the family relationship between the managers and the other members inside the banks such that everyone works as a family member to achieve the stipulated goals.

Jordan, as an Arabic country, was identified with high PD and relatively high UA as it can be seen in figure 2. Cultural contexts with high power distance and uncertainty avoidance, such as Arabic context have a lower rate of adoption and use ICT than other contexts with low power distance and uncertainty avoidance such as Western countries [2].

6. Results

Building on our hypotheses and previous studies in adopting new ICT in the context of Jordan, the national culture in Jordan might negatively affect the new ICT and innovation inside the bank. Also, the Jordanian national culture might have a negative impact on the non-Jordanian bank in both organisational culture, and the new ICT and innovation. The reason behind that negative impact might be related to the high power distance and uncertainty avoidance dimensions readings in Jordan, which are characterised by low innovating and risk-taking, and less adopting of new ICT.

7. Business Benefits

This study is significant due to the scarcity of studies that contribute to the effect of culture on the innovative OBT risk communication process inside banking industries within Jordan. Moreover, the potential of OBT risks would be higher as not enough attention has been paid to socio-organisational risk management aspects [15].

The banking industry can benefit from this approach specifically, when banks work in multi-cultural contexts since, these days, leaders need to manage conflict that might take place regarding different employees' backgrounds. In addition, managers need to manage the complexity of unprecedented environment due to the high pressure for innovation and the internationalisation phenomenon [6]. The complexity of innovation could be due to a

variety of conflicting activities, such that many leaders have to work in different cultural contexts and to lead people with diverse backgrounds [6]. Therefore, understanding the OBT risk communication process from a cultural point-of-view would help in understanding success of multi-cultural bank's performance such as OB services [12]. The proposed approach in this study will benefit the management through improving awareness of the cultural values for more effective communication during risk management. This approach does not represent a prescription for management. Rather it encourages managers to pay more attention to cultural values that would enhance or hinder the risk communication process effectiveness.

8. Conclusions and Limitation

The purpose of this study is to introduce a non-technical approach to the OBT risk communication innovation process by developing a socio-organisational framework. A proposed framework includes the national and organisational cultures that should be kept in management's mind while they are dealing with OBT risk issues.

From the literature, national culture has been impacting on a user's attitude towards OB usage. Likewise, national culture has an impact on the individuals and groups inside a bank. In other words, organisational culture will be affected by national culture through the individuals and groups inside a bank. Moreover, organisational culture has been approved to draw the way of doing, managing, and delivering the business inside and outside banks in local and international contexts. As a result, organisational processes efficiency such as the innovative OBT risk communication process is affected by both national and organisational cultures in a way or another.

The main contribution of this study is to develop a socio-organizational framework in the context of innovative risk communication processes along with the interrelationships between these aspects. This framework can be used, practically, IT groups and managers in order to improve their performance, and the efficiency of innovative communication process and IS risk management.

As with other studies, this study has some limitations. Firstly, the study framework has been built based on the available literature and the understanding of the authors. Secondly, this framework has not been empirically tested yet so the results might or might not be validated after testing.

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