Shar’ia Compliant Electronic Payment Systems – Libyan Case Study

Enas Bader Hamed  
*Cardiff School of Management, Cardiff’s Metropolitan University, E.Hamed@cardiffmet.ac.uk*

Hilary Berger  
*Cardiff School of Management, Cardiff’s Metropolitan University, Hberger@cardiffmet.ac.uk*

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Abstract

The exponential growth of e-commerce borne from globalisation has fuelled the use of e-payment systems that are clearly a prerequisite business practice given that Internet consumers must pay for products and services. It is acknowledged that credit card payment is the foremost method for on-line purchases. However in Islamic countries, such as Libya, religious and ethical barriers prohibit the earning of interest [Riba] that is commonly associated with e-payment methods because it contravenes the Islamic concept of Shar’ia. Our longitudinal research aims to propose a Mudaraba driven business model which relates to earning profit rather than interest, as a potential solution to facilitate easier use of credit cards for e-commerce activities in developing countries such as Libya. In this research paper we present findings from an initial study, utilising a group of business professionals in the Libyan banking sector, to establish the current status of e-payment business practices and the awareness of associated risks.

Keywords: Credit Cards, E-payments, Libya, Mudaraba, Riba, Shar’ia,

1. Introduction and Theoretical Context

The ultimate aim of our longitudinal research study is to propose a Mudaraba driven business model as a potential solution for the use of electronic payment systems in Libya. In this research paper we present findings from a pilot study utilising a group of business users in the Libyan banking sector, to determine the current status of e-payment business practices and examine the awareness of associated risks.

1.1 Information Systems in Developing Countries (ISDC)

The Information Systems in Developing Countries (ISDC) research arena is acknowledged as a subfield of the wider Information Systems (IS) field and seeks to expand the IS research domain to address the broader socio-economic contexts of organizations hosting new technologies providing a rich field for research (Walsham and Sahay 2005). Avgerou (2008) refers to ISDC research as ‘IS innovation’ studies explaining that the experience of an IT development and implementation in situ (i.e. DCs) constitutes an innovation for both the host organization and the associated socio-economic context regardless that the ‘innovation’ may exist outside that specific milieu and is thus, closely associated with the socio-economic policies within which the innovations take place (Sahay 2001; Walsham et al. 2007). In this sense innovation can be defined as an “idea, practice or object that is perceived as new by an individual or other unit of adoption” which may well exist elsewhere but is new, adopted and implemented within host organization (Rogers, 2003, p11).
Literature evidences that ISDC research studies draw heavily from the theories and methodologies of the wider IS field which reflect broad and established thematic IS categories (i.e. systems development and implementation; IS management; ICT; IS and organizational change to name a few). However the issues and concerns addressed are deflected towards the perceived particularities and consequences of the IS innovation itself and this has particular importance for ISDC research (Avgerou 2008; Jarvenpa and Leidner 1998; Madon 1993; Silva 2002). Indeed, with regard to ISDC the focus of IS research attention and continuing debate extends beyond organizational and national boundaries to address global, economic, social and political activities where the knowledge of local conditions and processes of socio-technical change are implicit for IS research and practice in DCs (Avgerou 2003, 2008; Orlikowski et al. 1996).

More specifically, the Internet has led to the explosion of the development of activities in the financial services sectors and the economic development of most nations (Al-Hajri and Tatnall 2008). Consequently, consumer spending via the Internet is growing exponentially increasing the importance of online payment systems where the credit card, at 90%, is the most used and accepted method of payment (Rob & Opara 2003). However, in developing countries such as Libya a significant barrier is the lack of uniform e-payment systems resulting from ICT infrastructure limitations, trust issues and specifically cultural aspects (i.e. religion) preventing many from benefiting fully from such technologies (Thao and Swierczek 2008).

Nonetheless, the strong role that the Islamic religion plays in business and trade in Libya requires a cultural understanding which is locally situated and embedded in everyday, socially negotiated work practices (Weisinger and Trauth 2003). Thus, individuals are subject to a set of cultures and sub-cultures (Straub et al. 2002). For example, in Libya traditionally banks have delivered services through face-to-face interactions with customers where many actions and symbols assume a particular cultural significance. A handshake or oral communications are perceived as more legally binding than a written and signed contract (Hill et al. 1998; Laukkanen and Pasanen 2007). Thus, in developing countries it is necessary to understand the social, cultural and political forces that may represent barriers in successful adoption of e-payment systems driven by ICT and globalization (Thao and Swierczek 2008).

The aim of our paper is to present the findings of our initial investigation to establish, and increase understanding of the current status of e-payment business practices, and determine the awareness of the associated risks within Libya.

### 1.2 Banking Systems and Islamic Law

Modern banking systems worldwide are based on the principle of applying rates of interest to banking activities that generate profit. Whereas, the foremost pillar of Islamic banking is the forbiddance of Riba i.e. the paying or receiving of interest. Libyan banking activities must be compliant with the principles of Islamic law (Karich 2004, the Quran, verse 2:275). Nonetheless, literature reports that the market for Islamic banking is a growing phenomenon with assets currently around US$300 billion and a projected annual growth of 10-15% (Iqbal and Mirakhor 2007, Jackson-Moore 2009, Levine 2005). However, there is little evidence to suggest that Muslims benefit from this growth by performing Islamic financial transactions electronically. Many Muslims confine their banking involvement to transaction activities such as current...
accounts and money transfers or valid trading (by mutual consent) that is permissible as it does not include any payment and/or receipt of interest (El Gamal 2000).

The exponential growth of e-commerce borne from globalisation as a means to perform business transactions is widely acknowledged (Beulen et al. 2010). In parallel the concept of credit card payments for on-line transactions at the point of sale and via the Internet has become common place (Iqbal and Mirakhor 1999). It is a given that electronic systems are clearly a prerequisite for e-commerce, since on-line consumers must pay for products and services (Nasrabadi 2006). The use of e-payments mechanisms such as credit cards that traditionally attract high rates of interest if not fully reimbursed on a monthly basis presents a barrier for the Islamic banking community because it clearly contravenes the Islamic concept of Shar’ia. Consequently, should a Muslim wish to purchase goods or services using e-payment systems such as credit cards, then a conventional credit card transaction will clearly not be acceptable since it involves paying interest unless full payment is made shortly after receipt of the bill from the card issuer (Haron 2001).

Despite the development of many electronic payment schemes through the integration of information and communications technology, there is a need for financial mechanisms to facilitate Islamic business transactions to be performed electronically in line with Sha’ria principles and the forbidden (Riba) interest (Iqbal and Mirakhor 1999, Nasrabadi, 2006). Indeed, literature substantiates the increasing demand for Shar’ia compliant (interest free) banking products from Muslim clients wanting to transact e-business in accordance with Islamic law (Chong and Liu 2009, Council of Islamic Bank (2005), Haron 2001). Despite the development of many electronic payment schemes, there has been little progress in Libya to enable Islamic financial instruments to be performed electronically with ease and Libyan banks have struggled to integrate Shar’ia compliant business practices (Khalfan and Alshawaf 2004).

We propose to develop a Shar’ia compliant business model based on Mudaraba principles as a means for conducting e-transactions at the point of sale for on-line purchases. Mudaraba is an Arabic term that means obtaining profit, and is a type of trust trading. Financially, it means cost plus profit of sale, but in Islamic law the commodity is purchased from a third party. It is biased towards being advantageous to banking institutions as its key aim is to reduce any loss on their part. Therefore, the customer bears 100% of any loss incurred. Thus, it is profit rather than interest driven, and the customer is aware of the original price, including the costs necessary to obtain the commodity, and the profit applied (Hasanin, 1996, Iqbal and Mirakhor 1999). However, as an initial step our pilot study seeks to identify current status of e-payment business practices and examine the awareness of associated risks.

2. Research Method and Design

This initial research stage of our longitudinal exploratory study utilized a questionnaire to determine the current status of e-payment business practices and examine the awareness of associated risks. This is deemed a necessary prerequisite to our ultimate aim of proposing a model for adoption of Shar’ia compliant electronic payments in Libya that would be beneficial for the new Libyan society.
An interpretative research stance was adopted aimed at understanding the meaning behind behaviour, actions and shared experiences. The research findings will be meaningful to the people it applies to. In other words, the theory generated (through the longitudinal study) will relate to the Libyan case study (Cohen et al. 2007; Ritchie and Lewis 2004; Saunders et al. 2007). Thus, emergent theory arising from this particular study is grounded in the data generated by the research conducted (Glaser and Strauss 1967).

Saunders et al. (2007) report that the classification of a research purpose is threefold, exploratory, descriptive and explanatory (p133), and its design provides the general framework for the collection and analysis of data associated with the phenomenon under investigation. Our study is exploratory and is aimed at “finding out what is happening, to seek new insights, to ask questions and to assess the phenomena in a new light” (Robson, 2002, p59).

2.1 Sampling

Due to the context of the research study purposeful sampling was chosen. In particular judgement sampling identified those best placed to provide the required information. Respondents acknowledged as being representative of the context of the adoption of electronic payment systems in Libya were selected based on the realistic assumption that they held the relevant knowledge, expertise and experience of the issues under examination (Ritchie and Lewis 2004; Sekaran and Bougie 2010; Silverman 2010). Thus, to generate initial primary data, a semi-structured questionnaire involving both open and closed questions was conducted with 15 Financial Managers (General Managers, Operational Managers and Central Bank Managers) of five commercial Libyan banks.

2.2 Questionnaire

The questionnaire involved both closed and open-ended questions. The former aimed to facilitate statistical analysis from the range of potential criteria provided. The latter enabled the respondents to give their views and opinions that would otherwise be lost with merely closed questions (Collis and Hussey 2003). Qualitative data is key to understanding the rationale that underpins any causal relationships identified through statistical analysis (Yin, 2009).

The questionnaire was piloted with a group of six Libyan respondents in both Arabic and English languages to ascertain any uncertainty or ambiguity of the questions asked or the range of answers sets provided. The pilot study identified the need to modify the design of the questionnaire and refine the initial grouping of the questions into four sections: Business Customers, Islamic Bankers, E-Payments and Other Issues. This ensured that the correct data was being collected such that the research objectives would be met (Saunders et al. 2007; Silverman 2010).
Participants were provided with a covering letter explaining the purpose of the study, and setting out the aim and objectives of the research. Additionally, as with all academic research, prior to the data collection process ethical approval was obtained from the Ethics Committee of the Researcher[s] Institution. All participants gave informed consent, were ensured of confidentiality and anonymity, understood that data would not be passed to any third parties, and also informed of their right to withdraw at any time without consequence or penalty (Bryman 2004; Cohen et al. 2007; Sekaran and Bougie 2010; Silverman 2010).

2.3 Data Analysis

Following the completion of the questionnaire process the quantitative data of the closed questions were compiled and statistically analysed to identify themes and emergent patterns. The qualitative data gathered from the open questions were analysed into categories to support, or not, the statistical analysis. The whole data set was then further examined and analyzed to reflect potential findings and are discussed in the following section (Cresswell and Plano Clark 2011; Saunders et al. 2007).

3. Analysis

Within the scope of this research paper we discuss the two key findings from our initial study. Firstly, we identify the current status of e-payment business practices, and secondly we examine the awareness level of risks associated with credit card usage.

In response to the question ‘Does your banking institution have any e-payment systems compliant with Shar’ia law?’ we found that only 28% of respondents said ‘yes’ but were not able to provide further detail, 42% acknowledged that their banks did not provide any Shar’ia compliant e-payment services and the remaining 30% were not aware of any provision. This relates to provision for both private and business Muslim customers/clients. We believe that the underlying rationale is twofold. Firstly, the expected cultural barriers related to Riba and the prohibition of earning interest, and secondly the obviously correlated poor or lack of infrastructure to deal with Shar’ia compliant e-mechanisms in Libya. In other words if such e-payment services are not provided then it stands to reason that there will be inadequate provision to deal with them. However, a less obvious obstacle reflects the difficulty in obtaining easy to use, off the shelf e-payment systems that are Shar’ia compliant. This was compounded by the belief that any supposed benefits of such readily available systems would not fully comply with Shar’ia law.

Secondly, when asked about awareness of risks associated with credit card usage the highest return at 51% was the ‘do not know’ category. 41% of participants were aware that payments using credit cards involved risks but believed that the risks involved were not specific to Islamic banking and therefore not unique to Shar’ia compliance. Their understanding of credit cards was biased towards fraud and security issues rather than concern about the earning of Riba. 8% stated they had no awareness of the risks involved. We expected to find more reference to the issue of payments bearing a rate of interest if not fully repaid at end of each month thus preventing the rolling over of
any balance to next statement period. In this way Riba can be avoided and this interpretation could be regarded as Shar’ia compliant. Interestingly, these responses about risk awareness were not as culturally biased as expected and, once again, may stem from a lack of information or understanding about possible use of credit cards in a Shar’ia compliant practice.

Islamic banks are keen to identify an approach to the issues of charging interest that is suited to both Islamic legal and religious perspectives within the banking domain but which are also acceptable in business practice. We propose to base our Shar’ia compliant business model upon the already accepted principles of Mudaraba that is based on trust trading and is a form of financing that is profit driven and currently provided by Islamic banks.

4. Conclusion

Islamic banking plays a valuable and integral part in the development of the national economy in Libya by creating wealth for individuals and the community under the principles of Islamic Shar’ia law. Ensuring Shar’ia compliance is seen as the most important issue in Islamic banking which impacts upon e-commerce and the use of cards credits and debit and charge cards. Nonetheless, a Shar’ia compliant e-payment system would be significant not just for Muslims in Libya, and across other Islamic countries but also non-Muslim communities worldwide that would benefit the national economy.

Although some banking institutions acknowledge the need for Shar’ia compliant mechanisms and provide, strategically, some level of engagement with Islamic ruling our findings indicate overall that acceptance of Shar’ia compliant e-mechanisms is low. However, we believe that the low recognition is driven by a lack of, or inadequate understanding and knowledge which represent a significant barrier in Libya.

Equally low awareness of associated risks revealed that of those who identified risks were more concerned about generic risks related to security and fraud issues rather than be culturally unique to Shar’ia compliance. The ‘don’t know’ category may similarly arise through a lack of information or understanding about possible benefits of credit cards use in a Shar’ia compliant practice. Despite these initial findings that only represent a snap shot analysis we believe that the lack of awareness does not necessarily mean that there is a lack of demand for Shar’ia compliant business practice and credit card adoption.

References


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