

# The Role of IS in Islamic Banking: A Cultural Perspective

**Mian Farooq Haq**

Department of Information Systems  
London School of Economics  
Houghton Street  
London WC2A 2AE  
Fax: +44 (0)20 7955 7385  
[m.f.haq@lse.ac.uk](mailto:m.f.haq@lse.ac.uk)

**Steve Smithson**

Department of Information Systems  
London School of Economics  
Houghton Street  
London WC2A 2AE  
Tel: +44 (0)20 7955 7647, Fax: +44 (0)20 7955 7385  
[s.smithson@lse.ac.uk](mailto:s.smithson@lse.ac.uk)

## Abstract

*This research is located in the topic area of culture and information systems. It is set in the finance industry against the backdrop of globalisation. The particular focus is on the influence of Islamic culture on the role and development of information systems in Islamic banking. The notion of role is treated as a rich description of the behaviour and responsibilities of information systems. This research will use ANT (Actor Network Theory) to study the relevant actors i.e. humans and non-humans, heterogeneous networks and relationships that form the research area. An interpretive approach has been adopted for this work, using multiple case studies. The underlying theories and research design are discussed for this research in progress.*

## Keywords

Culture, Islamic Culture, IS, Actor Network, Globalisation, Islamic Banking, Banking Paper Formatting

## 1 Introduction

Globalisation, fuelled by the development of new ICTs (information and communication technologies) (Giddens 1999) is having profound consequences for many industries, especially the banking and finance sector. Deregulation and developments in IS (information systems) have contributed towards a major transformation in this sector. Today, most of the world is moving towards a universal banking model, where a financial institution can be at once a commercial bank, an investment bank and a shareholder in an industry; something inconceivable in the 1930s (Poole 1999).

At the same time, a rather different development is emerging in many countries, namely Islamic banking. This is a growing phenomenon that came into existence to satisfy the financial needs of

Muslims who have to observe the prohibition of interest-based transactions. Previous transformations in conventional banking regulations suggest there is sufficient flexibility to accommodate the additional changes needed to support Islamic banking. This removes a longstanding argument that Islamic banking is infeasible in a regulatory sense (Warde 2000).

This research examines the role of IS in Islamic banking, within the overall research area of the relationship between culture and information systems. In this case, we are concerned with Islamic culture. Actor Network Theory will be used to identify relevant actors (human and non-human), networks and relationships.

This paper continues with a summary of the relevant literature, followed by a discussion of the research approach and methodology. The concluding section summarises the arguments put forward.

## 2 Literature Review

### 2.1 Islamic Banking: An Overview

All the monotheistic religions have their own sets of divine values and norms with regard to human behaviour, in particular economic behaviour. Islam, with its 1.2 billion followers is the second largest religion in the world and it requires Muslims to lead their lives according to the Islamic legal code of 'Shariah' principles. Commerce is central to the Islamic tradition (Warde 2000). The prohibition of *riba*, a term literally meaning an excess and interpreted 'as any unjustifiable increase of capital whether in loans or sales' is the central tenet of the Islamic economy. This prohibition is based on arguments of social justice, equality and property rights.

There are about 250 Islamic financial institutions worldwide with more than \$200 billion under their management. These Islamic banks have been growing at a rate of around 10% p.a. over the last decade (Iqbal 2000). Their clientele is not confined to Muslim countries but is spread over Europe, the United States and the Far East. Realising the potential of this emerging form of banking numerous conventional banks started 'Islamic windows'. Islamic banking continues to grow at a rapid pace because of its value-orientated ethos, enabling it to draw finances from both Muslims and non-Muslims alike.

At the same time, Western attitudes are changing, as can be seen in the recent growth of 'ethical' banking, where (non-Islamic) customers refuse to invest in companies engaged in unethical and socially harmful activities (e.g. armaments or tobacco).

Describing the Islamic financial system simply as interest-free does not provide a comprehensive picture. Some key instruments of Islamic banking are briefly discussed below.

***Murabaha***: Under *murabaha*, the Islamic bank purchases, in its own name, goods for an importer or buyer who cannot afford to pay directly, and then sells them to him at an agreed mark-up. This is the sale of a commodity at a price, which includes a stated profit known to both vendor and purchaser (a cost plus profit contract). This technique is usually used for financing trade, but because the bank takes title to the goods, and is therefore engaged in buying and selling, its profit derives from a real service that entails a certain risk, and is thus seen as legitimate. Simply advancing the money to the client at a fixed interest rate would not be legitimate. Only a legitimate profit is

considered lawful under Islamic law; any excessive addition on account of deferred payments would be disallowed as it would amount to a payment based on the value of money over time i.e. interest.

**Mudaraba:** This implies a contract between two parties whereby one party, the *rabbul-mal* (beneficial owner or the sleeping partner), entrusts money to the other party called the *mudarib* (managing trustee or the labour partner). The *mudarib* is to utilise it in an agreed manner and then return to the *rabbul-mal* the principal and the pre-agreed share of the profit. The *mudarib* (bank) keeps for itself what remains of such profits. The division of profits between the two parties must necessarily be on a proportional basis and cannot be a lump sum or guaranteed return. The investor is not liable for losses beyond the capital he has contributed. The *mudarib* does not share in the losses except for the loss of time and effort.

**Musharaka:** This is a partnership, normally of limited duration, formed to carry out a specific project. It is similar to a Western joint venture, and is also regarded by some as the purest form of Islamic financial instrument, since it conforms to the underlying partnership principles of sharing in, and benefiting from, risk. Participation in a *musharaka* can either be in a new project, or by providing additional funds for an existing one. Profits are divided on a pre-determined basis, and any losses shared in proportion to the capital contribution.

Every Islamic bank has a committee of religious advisers whose opinion is sought on the acceptability of new instruments and who provide a religious audit of the bank's accounts. In Islam moral and equitable values form an integral part of the law governing contractual and financial relations to such an extent that the relationship between equity, law and religion is central to all business. Table 1 compares the Islamic financial instruments and practices with those of conventional banking.

Characteristics	Islamic Banking	Conventional Banking
Nominal value guarantee of: Demand deposits Investment deposits	Yes No	Yes Yes
Equity-based system where capital is at risk	Yes	Yes
Rate of return on deposits	Uncertain, not guaranteed	Certain and guaranteed
Mechanism to regulate final returns on deposits	Depending on banks performance/profits from investment.	Irrespective of banks performance /profits from investment.
Profit & Loss Sharing principle is applied	Yes	No
Use of Islamic modes of Financing PLS and non-PLS modes	Yes	N/A
Use of discretion by banks with regard to collateral	Possible for reading moral hazard in PLS modes. Yes in non-PLS modes	Yes always
Banks 'pooling of depositors' funds to provide depositors with professional investment management	Yes	No

Table 1 Comparison of Islamic and conventional banking practices (Errico and Farahbaksh 1998)

## 2.2 ICTs and Islam: A Developing Countries Cultural Perspective

'Globalisation' often involves a repeated meeting of different cultures. It represents economic, cultural and political interactions having a considerable impact on daily life. Economically it involves the spatial reorganization of production, industries spreading across borders and the expansion of financial markets. Culturally it includes the global spread of consumer goods and, politically it tends to represent the spread of western style democracy.

Authors such as Albrow (1996) portray globalisation as involving cultural homogenisation and as a process involving the increasing domination of one culture over all others. However others (Robertson 1999, Walsham 2001) argue that we should not equate the interactive connecting of cultures with homogenisation. There is no single universal culture but the underlying globality supports the notion of the boundlessness of culture(s) and the diversification of culture rather than homogenisation.

'Culture' is an important ingredient of the global field. Every community or institution has a culture. Culture has been defined as everything that people have, think and do as members of the community. It can be described as the order of life in which humans construct meaning through practices of symbolic representation or it can be seen as a concept individuals, groups and societies produce and acquire in order to function effectively. Thus culture in the democratic anthropological sense describes a 'whole way of life'; it is not an exclusive property of the privileged but inclusive of all manner of everyday practices. It is ordinary in every society and in every mind. Culture's significance varies considerably in a society's history, as well as across societies and civilizations (Robertson 1999).

Religion, a key element of culture, can be described as a cluster of beliefs, which are used in day-to-day activities. It is more than an ecology of themes for social communication rather it is a specific way of communicating. It is not just cultural arbitrariness, but it is also systemic. Religion does not just lie in its capacity for differentiation (of people), it also lies in its ability to structure and lend meaning to the everyday, to the local world of interaction. Currently we are witnessing a wide religious reinterpretation, spurred on by changes at national and global levels. (Haynes 1999).

The political, social and cultural values embedded within the development goals of projects shape the development and use of technology (Madon 2000). One concern of Muslims using IT is that they are passive consumers of a technology created elsewhere, which is not value-free. IT's close connection and integration with Western culture is sometimes viewed as a threat to Muslim societies (Ahmad 2001). A related issue concerns the increasingly common situation where the culture of the software development environment differs to that of the implementation environment (Zakaria et al 2003).

### **3 Research Question, Approach and Methodology**

The field of research is thus the relationship between culture and information systems and the specific research question is "*What is the role of IS in Islamic Banking?*"

The notion of 'role' is taken to mean a rich description of the expected behaviour and responsibilities of IS, paying special attention to the influence of Islamic culture. We expect to focus on how this culture influences the relationships between the IS and the bank, its customers, the regulators, the conventional banking system and Islamic society as a whole. In Islamic banking IS's role is likely to go beyond its Western counterpart as Islamic banking regulations require more information disclosure as well as the explicit recognition of Islamic values. These values related to IS are more highly developed than general ethical principles. In Islamic banking IS development would require the inclusion of this strengthened ethical component according to the regulations laid down by the Sharia council. The different culture and the increased ethical component, plus the growing demand for customized software for Islamic banking and its different environment makes the study of the role of IS in Islamic banking a feasible and interesting project.

Islamic principles necessarily originate from the Quran, which thus becomes a central 'actor' in the development process. The research thus examines the influence of the Quran on the banking regulations and on the development, implementation and use of software tools in Islamic banking. We will examine the cultural and ethical issues involved and their effects on the entire process.

Because of the vital role of non-human actors, especially the Quran and banking regulations, actor network theory has been selected as the main research approach. ANT caters specifically for hybrid

entities (Latour 1993) containing both *human and non-human* elements. It is an analytical tool, which helps to examine the way these actors associate with each other and has been used successfully in IS studies whose focus is on the social, technical and political interactions (Avgerou 2002).

Thus, we are using an interpretive approach based on multiple case studies. The lack of previous research suggests that a relatively exploratory study would be more insightful and the lack of any single major development project in this area precludes a single more detailed ethnographic study. In other words, while every study has to strike a balance between depth and breadth, the state of research in the area suggests that breadth, through multiple case studies, may be more useful. The case studies would be examined in two phases. The data from the first phase is expected to allow us to set the focus and identify the key issues, to be explored in depth in the second phase.

The case studies will be qualitative, with data collected through semi-structured interviews, examination of documents, and observing the contemporary structures and systems used by the organizations. For each case study, interviews will be conducted with representative actors involved in the banking (senior and middle) management, IS development, Shariah Council and customers.

The intended case studies are a large global bank that over the last four years has significantly enhanced its profile in Pakistan and recently cemented a strategic alliance with an Islamic bank. This case will provide an opportunity of observing how two different banking practices have come together and share resources and the role that is played by IS. The other case study is a pure Islamic bank that was the first in Pakistan. It provides an opportunity of observing the structure and working of a pure Islamic banking network. In addition, we will examine other Islamic banking enterprises in less depth. These cases will allow a comparative study of the working of Islamic instruments in both pure Islamic and conventional surroundings. This will be conducted with a view to Islamic finance theory, aided by the use of ANT in order to study the networks involved and the translation processes within those networks.

## 4 Conclusion

This paper has outlined the framework for the study of the role of IS in Islamic banking within the overall relationship between culture and information systems. Despite the richness of the study area, this topic has been largely neglected to date.

The notion of 'role', a rich description of expected behaviour and responsibilities, seems to be an appropriate approach to study the influence of Islamic culture, strongly supported by Actor Network Theory to identify relevant actors (human and non-human), networks and relationships.

Islam is a fast growing religion whose fundamentals are appealing to an ever-growing Muslim community. This community is itself growing in economic and political importance globally. Islamic banking is an essential component of everyday Muslim business life. It is thus felt that the research will make a useful contribution to IS theory and practice.

## References

- Ahmad F (2001) Recommendation of Workshop on Software Development in Ummah. In proceedings of International Conference on Information Systems and Islam Kuala Lumpur. Malaysia.
- Albrow M (1996) The global age: state and society beyond modernity. Polity Press, Cambridge.
- Avgerou C (2002) Information systems and global diversity. Oxford University Press, New York.
- Errico L and Farahbaksh M (1998) Islamic Banking: Issues In Prudential Regulations And Supervision. Working Paper WP/98/30, International Monetary Fund
- Giddens A (1999) Runaway World: How Globalization Is Reshaping Our Lives. Profile, London.
- Haynes J (1999) Religion, globalization, and political culture in the Third World. St. Martin's Press, New York.
- Iqbal M (2000) Islamic and Conventional Banking In The Nineties: A Comparative Study. In Proc. Fourth International Conference On Islamic Economics And Banking on Islamic Finance: Challenges and Opportunities in the Twenty-First Century, p.409, Loughborough University U.K.
- Latour B (1993) We Have Never Been Modern. Harvester Wheatsheaf, Hemel Hempstead.
- Madon S (2000) The Internet and Socio-Economic Development: Exploring the Interaction. Information Technology and People 13(2).
- Poole W (1999) The Structure of Our Changing Banking Industry: Let the Market Decide. In Proc. Senior Bank Management Conference Acapulco. Mexico.
- Robertson R (1996) Globalization: social theory and global culture. Sage Publications, London.
- Warde I (2000) Islamic Finance In The Global Economy. Edinburgh University Press, Edinburgh.
- Walsham G (2001) Cross-Culture Issues in Global Outsourcing of Software. Working Paper, Judge Institute, Cambridge University, Cambridge.
- Zakria N, Stanton JM, Shreya TM, Barney S (2003) Designing and Implementing Culturally-Sensitive IT Applications. Information Technology & People 16(1).