

Addressing Emergent Context of Shariah Compliant Financial Services: A Service Designing Construct

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The last two decades have seen substantial geographical, sectorial and service portfolio growth in shariah compliant financial services (SCFS). We describe this growth in terms of the emergent context. Literature in general service and financial service design consider context as an important element of the service design, but little attention is given to understanding and defining of emergent context itself. We discuss general service and SCFS design literatures which establish the need to understand the context of SCFS design and implementation. To inform relevant SCFS design, we show how multiple resource factors (geographical, sectorial and service portfolio) create emergent context at a specific point in time and how emergent context and real SCFS in it can be addressed or coded. Coding of emergent context can enable financial service designers, regulators and institutions to persistently observe and adapt the SCFS design accordingly.

Keywords: Emergent Context, Financial Service, Service portfolio, Shariah

Field: Banking and Finance

1. Introduction

Recent surge in the *shariah* compliant financial services (SCFS) in different parts of the world has brought both challenges and opportunities (Hasan and Dridi, 2010). This growth forces the sector to design innovative financial services that are capable of fulfilling the needs of emerging geographical regions, sectors and service portfolios, and remain compliant to the structural values and economic objectives of the *shariah* (Islamic law). This expansion in SCFS is not one dimensional. On the one hand, it is growing into in new geographical regions (e.g. establishment of European Islamic Investment Bank, Islamic Bank of Britain) and on the other hand it is entering into new financial sectors of the same economies (from commercial banking to insurance and capital markets). Resource factors specific to these regions, sectors and resultant service portfolios need instant adaptation or migration decisions with regard to SCFS design (i.e. changes in the existing SCFS designs). Adapting SCFS designs in emergent context is important for SCFS to sustain its growth along with adherence to shariah.

However, the existing designs of SCFS, in theory and practice, do not considered the emergent context factors. We address this problem by

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conceptualising how multidimensional resource factors create an emergent context which forces SCFS to adapt or migrate.

This paper firstly, review the service design and SCFS design literatures related to context and its interaction with service design. Then explore the emergent context of SCFS based on its three dimensional expansion (geographical, sectorial, service portfolio). Apart from linking general service design literature with that of SCFS design, this paper also contribute to the field by introducing the concept for addressing emergent context. This concept is raised through focus on the junction of resource factors of different regions, sectors and products interacting in the domain provided by time. Addressing or coding of such junction (emergent context) can enhance the prediction and planning capability of financial regulators, institutions, and shariah scholars in designing SCFS for emergent context. The last section of this paper discusses limitations and future research directions in the field.

2. Literature

2.1 Service Design

Service design is the integrated set of activities and procedures planned for service encounter point, the time at which service activity is produce and use by the service organisation and customer (Shostack, 1982, 1987; Chase and Apte, 2007). Earlier 20th century has seen a shift in design application from goods to service sector (e.g. Leffingwell, 1917; Barnes, 1937; Leffingwell and Robinson, 1943) All these earlier studies used goods manufacturing techniques to measure the efficiency and effectiveness of service providing organisations. Latter on studies such as Shostack (1982, 1987), Chase and Tansik (1983), Cook et al. (2002) Verma et al. (2002), and Roth (2002) focused on internal structure, elements and design of the service. In this era, importance of context as design element was though recognised but not effectively included in the frameworks and practices of service designing. Most of the studies of the time have provided static models and frameworks for general service design. Roth (2002) for example, have identified the emerging trend of design economics where important players like economists, managers, regulators and entrepreneurs have been shown as important role players in designing process of service. Shostack (1982, and 1987) contribution of molecular design of service and blueprinting helps to clarify and isolate the elements of service like product, service and bonds. The importance of human resource issues in service design have been highlighted by Cook et al. (2002). These contributions in the general service design literature help us to understand the basic elements or constructs of general service design.

2.2 Context in Service Design Literature

Context remains a deep concern of service design literature (Leffingwell and Robinson, 1943). Chase and Tansik (1983) have provided important incite into the interaction of service providers and customers, as an important element of context interacting with service design. Barras (1990) interactive model of service design related the importance of context in the service design.

Goldstein et. al. (2002) have stressed the interaction of service design with strategic objectives (element of internal context) and customer needs (element of external context). The Editorial review of 'new issues and opportunities in service design', Verma. et. al. (2002) have discussed the importance and involvement of context in the design of service and concluded that service design without its context, limits the capability of organisation to design market-winning services. However, this body of work assumes a static context for the designed service. The proposed models and frameworks are not capable of responding to changing context, which we discuss in this paper.

2.3 Context in SCFS Design Literature

Shariah compliant financial services (SCFS) received little attention of design science researchers. 'Financial engineering' and 'designing' are the terms normally used by researchers interested in designing and innovating financial activities, processes and providing solutions to financial service problems (e.g. Obaidullah, 1998; Iqbal, 1999; Iqbal and Mirakhor, 2008). SCFS are backed by economic contracts composed of many underlying (sub) sets of contracts working as building blocks/components of the overall financial service design (Iqbal, 1999; Iqbal & Mirakhor 2008). For example, under certain legal contracts of *Shirkah* (partnership), *Bai* (sale) and *Ijarah* (lease) a bank accepts deposits and provides funding to customers, where both bank and customer have their respective legally enforceable rights and responsibilities (Usmani, 2002; Obaidullah, 2005; Iqbal and Mirakhor 2008). Most of the key designers and researchers in the field (e.g. ObaidUllah 2005; Usmani 2002; Mirakhor, 1998; Iqbal, 1999) seem more focused on changing the structure of existing conventional banking services so as to bring structural compliance to shariah. Iqbal (1999) and Iqbal and Mirakhor (2008) have termed this approach as 'reverse engineering' where an existing conventional financial service (CFS) is divided (decomposed) into pieces and rejoin (recomposed) after removing/replacing the component causing shariah prohibition. However this practice of reverse engineering has been criticised by many researchers (e.g. Siddiqi, 2006; El-Gamal, 2008) on the grounds that it pays no or very little attention to the objectives of shariah, which are the safety and protection of religion, Life, intellect, lineage and property (ObaidUllah, 2005; Presley, 1994) of individuals and society as a whole. The absence of such '*essential evidence*' (in the words of Shostack, 1982) in the design then leads to displacement risk for shariah compliant financial institutions (SCFI) (Iqbal & Mirakhor, 2008). Disregarding shariah objective compliance in reverse engineering process can also delink the SCFI and customer views of shariah compliance, because customers may think of shariah compliance as compliance to objectives whereas the SCFI may consider that as structural compliance to shariah. Keeping this link between organisation strategy and customer need is important element of service design (Goldstein et. al., 2002). Siddiqi (2006) and El-Gamal (2008) have stressed social justice and fair contribution/distribution of wealth should be the objective of SCFS design. In sum, literature related to SCFS design is split into two counter schools of thought, one focusing on structural (*peripheral evidence*) compliance and the other focusing on compliance of financial services to shariah objectives (*maqasid or essential evidence*). However, the need is for a synthesis of these schools, which is the required

shariah compliance of financial services to both structure and objectives, neither of these should come at the cost of other. Getting both type of compliance will then let us use the word 'fully shariah compliant' financial services.

3. Methodology

Service design has its roots in design (Han, 2010). However, other subjects such as service system, service management, new product development, and management had also contributed to this field (Segelstrom, 2010). We used service design methodology to address the problem of context consideration in SCFS designs. Holmlid & Evenson (2008, p. 341) defined service design methodology as:

“Systematically applying design methods and principles to the design of services”.

Design methods and principles are also utilised by the system designers, project designers and other followers of the design science. We used March and Smith (1995) framework of design science, where they classified research outputs of design science research as construct, model, method and instantiation. The output of this paper is the construct of 'addressing emergent context' for SCFS designs to adapt in.

Design science methodology is well established in service design field, as renown studies (e.g. Shostack,1982; Chase and Tansik, 1983; Roth, 2002; Cook et. al. 2002; Verma. et. al. 2002 and so on) have developed successful service constructs and models by utilising service designing methodology. More specifically in the SCFS design literature, we can find studies such as Iqbal 1999; Iqbal and Mirakhor 2008, in which the authors used design science approach for introducing innovative engineering and reverse engineering of SCFS. By utilising the same methodology we developed the construct of 'addressing emergent context' as answer the problem of 'context consideration in SCFS' stated in the introduction of this paper. Following activities are undertaken to complete this research.

3.1. Review of general service design and SCFS design literatures to define and conceptualise emergent context. Sections 2.1, 2.2, and 2.3 provide detail of these discussions.

3.2. The impact of expansion in SCFS is explored in three dimensions (geographical, sectorial and service portfolio), through which the concept of emergent context is established and discussed. Sections 4.1, 4.1.1, 4.1.2, 4.1.3, and 4.2 provide detail of these discussions.

3.3. The construct of coding or addressing emergent context is developed and discussed in section 4.3.

3.4 A hypothetical example is discussed in section 4.4, to further elaborate the construct proposed.

3.5 Policy implications of this research for International standards setting organisations, regulators and institutions dealing in SCFS are discussed in section 5.1, 5.2, and 5.3.

3.6 Limitations of this research and future research directions are discussed in section 6.

4. Discussion and Analysis

4.1 Dimensions of SCFS Expansion

SCFS is growing in three visible dimensions, which are of geographical, sectorial and service portfolios. This growth results in an emergent context made of mutually inclusive set of resource factors contributed by the three dimensional growth.

4.1.1 Geographical Expansion

SCFS is expanding globally. Recent examples are the establishments of Islamic Bank of Britain and European Islamic investment Bank. This dimension of expansion brings a new set of resource factors specific to geographical regions such as USA, Britain and other European countries. Since the existing designs of SCFS are static, the financial service authority (FSA), which is the sole financial regulator in Britain, reported the problems in adapting SCFS for UK financial system, particularly its depository products (Ainley et. al, 2007).

Table 1: Geographical expansion of Islamic banking in different regions

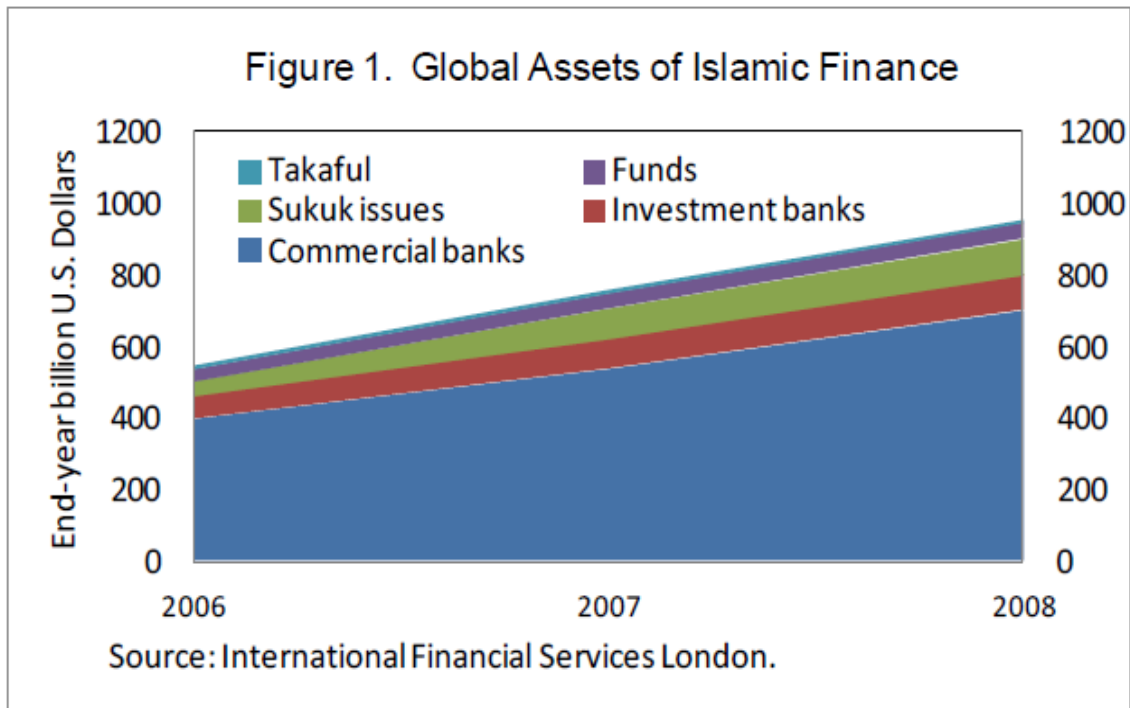
	Market share in 2008	Growth rate of assets (Islamic banks)	Growth rate of assets (banking system)1/	Period
Saudi Arabia 2/	35.0	33.4	19.0	2003-2008
Bahrain 3/	29.9	37.6	9.6	2000-2008
Kuwait	29.0	28.3	19.0	2002-2008
UAE	13.5	59.8	38.1	2001-2008
Qatar	11.5	65.8	38.1	2002-2008
GCC average	23.8	45.0	24.8	
Jordan	10.3	20.6	11.2	2001-2008
Turkey	3.5	41.0	19.0	2001-2008
Malaysia	17.4	20.0	14.0	2000-2008

Source: Adopted from Hasan and Dridi, (2010. P. 5). International Monetary Fund (IMF).

4.1.2 Sectorial Expansion

Around 1970, practice of SCFS was limited to banking sector only (Siddiqi, 2006), now it expended to many other financial sectors like insurance (takaful sector), capital market (sukuk market), mutual funds (Islamic funds) and investments banking (Hasan and Dridi, 2010). Figure 1 depicts the gradual assets increase in these sectors of SCFS. This sectorial expansion enforces

SCFS design to adapt and migrate in emergent context which is made of factors specific to these new financial sectors.



4.1.3 Service Portfolio Expansion

New regions and sectors emerge with new customers and needs. In response SCFIs expand their menus of services (service portfolios). This dimension of expansion results in a further resource contribution to context through factors specific to services portfolios made of instruments like *sukuks* (Islamic bonds), *takaful* (Islamic insurance) and units of mutual funds. For example, with the introduction of *takaful* a new context concern of *gharar* (excessive uncertainty) has gained further importance in SCFS designs.

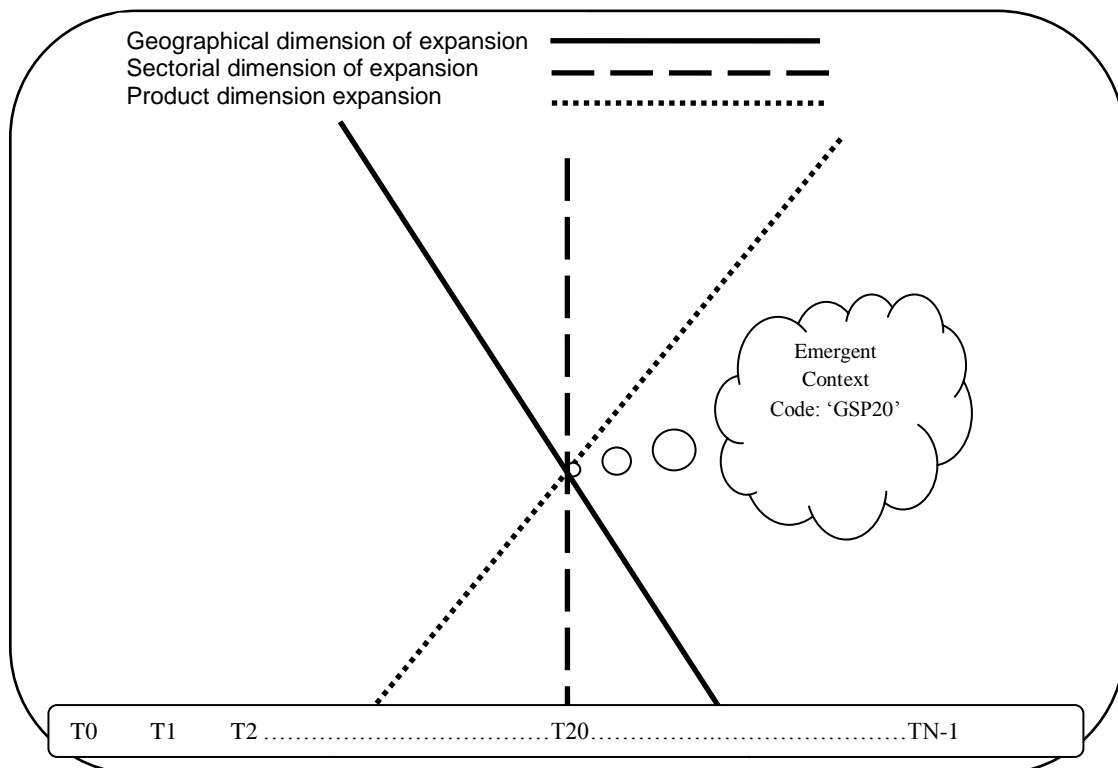
4.2 Time as Domain of Emergent Context

Expansion in SCFS is closely related with time continuum. With passing time the amount and kind of interaction among the resource factors change and result in an emergent context. Such context is a unified view or situation formed by resource factors (Tessmer and Richey, 1997). Emergent context coming of expansion contains resource factors from different geographical locations, sectors and services portfolios. Planning and designing SCFS for activation in such an emergent context requires specification of resource factors which make up this context. However, emergent context is not predictable and in turn not effectively planable (Patel, 2006, 2010) particularly in rapid growth (decline) situations, which requires instant decision and action for adaptation or migration right at the point of service encounter. Therefore, it is necessary to enhance the emergent context specification capability of stakeholders so as to effectively predict emergent context. This effectiveness in projection of context will in turn enhance planning and designing capability of SCFS designers, financial regulators and institutions.

4.3 Addressing or Coding Emergent Context

Multidimensional expansion of SCFS enhances both depth and breadth of this industry. Figure 2 portray how three streams of expansion (geographical, sectorial and service portfolio) create junction in particular point in time. Exploring this three dimensional expansion provides an opportunity to ‘code or address’ the emergent context of real SCFS. We coin the idea of ‘code’ or ‘address’, meaning assigning specific identifiers to emergent context through predictable information about three dimensions of expansion in SCFS. Graphically emergent context is the intersection point –junction of resource factors at specific point in time, requires a unique SCFS design. Emergent context at Junction T20, the point in time at which resource factors intersect can be coded as geographical (G), sectorial (S), and product portfolio (P) at time 20 so, the address or code can be used as ‘GSP20’. SCFS designer can use these codes or identifiers to better understand and predict changes in emergent context which can in turn make them able to effectively adapt or migrate SCFS designs in such emergent context.

Figure 3: Addressing Emergent Context



4.4. Hypothetical Example

Figure 4 illustrates a hypothetical example of shariah compliant commercial bank, planning to expand its operations to takaful (Islamic alternative of insurance service) to the corporate sector (sectorial expansion) of United Kingdom (geographical expansion). Solid line represents geographical expansion to UK, large dashes line represent sectorial expansion from banking to corporate sector and small dashes line represent product expansion to takaful. The intersection point of these resource factors create a junction which

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can be coded with the reference of first alphabets from each resource coupled with the point in time at which this interaction take place. All the three lines mentioned are interacting at point 20 (e.g. year 2020) thus creating and emergent context at point 20 *i.e.* UKCT20.

The number of such codes that a SCFI have, would represent the number of their service portfolio compositions, with focus on each, represented by region, sector and product line. Different points in these lines represents different regions such as countries or cities (for geographical expansion), different financial sectors such as investment, banking, insurance, and capital markets (for sectorial expansion) and for that matter different services such as depository, financing and agency products (for service portfolio expansion).

Such coding or addressing can enhance focus of standards sitting organisations, policy makers, and SCFS designers. For instance, design of takaful for corporate sector in US in year 2020 would have a code of USCT20 and in UK as UKCT20. If the designers want to expand the SCFS in UKCT20 to USCT20, the context consideration will merely need focus on the geographical resource factors (from UK to US). As the remaining code CT20 or corporate takaful in 2020 will remain be the same. Such a focus consideration on each dimension of expansion and resultant emergent context address could enhance design planning capability of stakeholders mentioned above.

5. Policy Implications

5.1 International Standard Setting Organisations for SCFS

International standards setting organisations for SCFS (e.g. Islamic Financial Service Board (IFSB), Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI)) frequently change their standards to cover emergent changes in SCFS designs. The construct of addressing emergent context, provide a close focus on the regional, sectorial and product portfolio factors of each country, which can make these organisations more effective in drafting standards. For instance, they can code or address emergent context of each locality, and in turn can suggest applicability of the standards they developed. In the same way, creating these codes will also enhance focus on SCFS compositions of different countries, which can enable these organisations to replicate the successful standards of similar codes. On the other hand, difference in these codes will highlight the focal areas of differences in SCFS practices, hence can work as problem hunting tool.

5.2 Regulators of SCFS

Like standard setting organisations, regulators of SCFS (e.g. State Bank of Pakistan, Bank of Nigara Malaysia, and Financial Services Authority in UK) can code or address the service compositions/portfolios of Islamic commercial banks, Islamic investment banks, takaful companies, and Islamic windows of conventional banks. This coding can deepen their focus on service portfolios, and can in turn improve their regulation and monitoring functions.

5.3 SCFS Designers

There are plenty of shariah compliant financial institutions (SCFIs) operating globally. These SCFIs can code their service portfolios for effective designing of SCFS. For instance, SCFS designs in UKCT20 will have different designing considerations than USCT20. Movement from UKCT20 to USCT20 will inform the designers to get more focus on the regional part of the context rather than focusing on sectorial, service, and time considerations. As both have the same codes for sector, product and time (CT20 or corporate takaful in 2020). The only aspect which need focus consideration is the change in the region from UK to US. In the same manner if change occurs in other aspects of the code such as sector (e.g. from corporate to consumer sector), product (from takaful to sukuk) or time (from 2020 to 2022), will then divert the attention of designers, to the areas which requires adaptation or migration in SCFS designs.

6. Limitations

SCFS is emerging concept and the literature is not rich enough to rely on. We therefore complemented the SCFS design literature with general service design literature developed so, to build the missing link as identified by Dar and Pressley (1999). Still this research has the following limitations:

6.1 The concept of 'addressing emergent context' is built on literature and lack the empirical testing. However, the concept is backed by well established service design literature and SCFS design literature.

6.2 The regional, sectorial and service portfolio factors were shown as the only contributors to emergent context. The context, in reality, can go further deepen in to factors specific to service providers and users as well. Future research can enrich the focus on emergent context by increasing the number of resource factors creating junctions at different points in time.

7. Conclusion

Context is a unified view or situation formed by resource factors from different geographical locations, sectors and services portfolios. If context reside in future state of time then can be termed emergent context. Emergent context forces SCFS designs to adapt or migrate so to effectively serve the market and remain *shariah* compliant. We studied service design and SCFS design literatures and found that context is an important element of service design in general and SCFS design in particular. However, emergent context around SCFS is not explored enough, which can enhance design and planning capabilities of financial service designers, regulators and institutions. We conceptualised expansion in SCFS in terms of the emergent context and came up with the construct of unique 'code' or 'address' of emergent context. The code can work as identifier of emergent context. This will let the shariah scholars, financial regulators and Institutions to predict changes in emergent context more effectively and adapt or migrate service design accordingly. Further research in the field can enhance focus on emergent context by increasing the number of expansion dimensions beyond geographical, sectorial, and service portfolio factors.

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