

# **INTERACTION EXPERIENCES AND OUTCOMES OF VALUE CO-CREATION IN BANKING IN SAUDI ARABIA**

**A thesis submitted as part of the requirement of the degree of  
Doctor of Philosophy in Marketing**

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### **Notice 1**

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## **Abstract**

Services theory emphasises the importance of both customer involvement in relevant processes and for service outcomes to be perceived as high value. Co-creation of value is a joint process by firms and their customers, during which they use reciprocal interactions to draw on relevant resources. However, current understanding of the meaning of co-creation is limited, especially with respect to multichannel service delivery. Hence, this project has two major aims. First, it explores the meaning of, and develops a measure for, the co-creation experience from the perspective of both managers and customers. Second, the project uses customers' responses to test relationships between antecedents of the co-creation experience, its dimensions, and outcome variables including customers' perceived value-in-use, and customer commitment.

To achieve its objectives, the project uses two sequential studies with data collected from five major banks in Saudi Arabia. In Study 1, the responses of 33 interviewees were content analysed to understand how the co-creation experience is interpreted. Three key dimensions were identified: joint problem-solving (JPS), joint relationship development (JRD), and joint knowledge and learning (JKL). In Study 2, responses from 528 banking customers were used to identify the psychometric properties of the co-creation experience measure, and to test hypothesised relationships between integration quality (antecedent), co-creation, the factors contributing to customers' perceived value-in-use (customer participation benefits, convenience value, and religious value), and customers' affective and continuance commitment to the bank.

Testing the measurement and structural models revealed that the three-dimensional measure of the co-creation experience is robust, but that the factors have different effects with respect to outcomes. JPS is positively related to only customer participation benefits of value-in-use, while JRD and JKL are related to affective commitment, but not to value-in-use. Additionally, JKL is linked to continuance commitment. These findings extend contemporary theory focussing on service-dominant logic. Finally, the antecedent, integration quality retains the importance

attributed to it in the literature in that it is related to each of the co-creation experience, convenience value and affective commitment.

Several implications for banking managers emerge. JPS needs to be proactive taking into account all types of contact with customers regardless of their location, and supporting coordination among different banking channels. To build positive feelings towards the bank, employees predominantly need communication skills to improve on and maintain existing customer relationships; while the JKL findings suggest that banks must invest in a variety of strategies to facilitate on-going education of both employees and customers about collaboration and the effective use of multi-channels.

This study has the limitations of cross-sectional research and as it was conducted on end consumers in Saudi Arabia, the findings might not be generalizable to developed or culturally different populations, or business customers. Other areas that warrant further investigation include the role and importance of religious value, which emerged as a dimension of value-in-use; the possible commitment or loyalty outcomes of JPS, which were not evident in the current study; and further research into JKL, which provided links to both affective and continuance commitment.

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## **Declaration**

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university or other institution and affirms that to the best of the candidates knowledge the thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

Signed:.....

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## Publications

Refereed conference paper related to this thesis

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# **Chapter 1 : Introduction**

## ***1.1 Background to the study***

Online solutions or electronic service (e-Service) is a product of two major movements within the business world: the shift from the dominant consumption of goods to the consumption of both goods and services, and the growing importance of Information Communication Technologies (ICT), especially the internet (Rust, 2001). This has led to a spectacular and sustained growth of the services sector, often provided across multiple delivery channels, which impacts the whole global economy. In essence, the dominance of services acts as a driving force in the economies of developed countries. This substantial growth of services is not only impacting powerful economies, but also developing ones, such as India, China and other countries in the Asia Pacific region (Bitner & Brown, 2006). The exponential growth of services all over the world and across different industries has led many researchers and practitioners to investigate the nature of the science of service and hence motivate service organisations to understand what creates service value for their customers (Ostrom et al., 2010). Grönroos and Ravald (2011) emphasised that the main purpose of providing services is to enable customers to create value for themselves, and this in turn allows service providers to create reciprocal value, which is the crux of service logic. This understanding has led researchers to view services as “a perspective on value creation, rather than a category of market offerings” (Edvardsson, Gustafsson, & Roos, 2005, p.118).

The concepts of service logic (Normann, 2001; Grönroos, 2008, 2009, 2011) and service-dominant logic (S-D) (Vargo & Lusch, 2004), have recently challenged the conventional thinking in service marketing literature. A review of literature emphasises that S-D logic supports the transformation from the traditional convention of goods logic, to service logic, focusing on services as the backbone to all exchanges and that organisations play a major role in utilising their “resources for the benefit of and in conjunction with another party” (Vargo &

Lusch, 2008b, p. 7). That is, the major idea underlying the new dominant logic is a shift from the mere exchange of tangible goods (goods-dominant logic) to the exchange of intangibles (i.e. service, competences and knowledge). According to S-D logic, value is co-created through the co-operative efforts of organisations, employees, customers, and government agencies, while taking into consideration the customer (i.e. the beneficiary) as the unique determinant of value (Vargo, Maglio, & Akaka, 2008). In parallel to the assumption that value is co-created, S-D logic also maintains that “value is uniquely and phenomenologically determined by the beneficiary” i.e. the customer, and that “the customer is always a co-creator of value” (Vargo & Lusch, 2008b, p. 7).

Focusing on the customer as the unique determinant of value emphasises the concept of “value-in-use” (Vargo & Lusch, 2004). The traditional perception of value is a trade-off between quality and cost; however, the new perception is that value is recognised when service is used, and further, that this value accumulates over time (Grönroos, 2011). As a consequence, value is central to consumers’ experiences (Prahalad & Ramaswamy, 2004). However, proponents of the service logic school of thought claimed that there was no clear conceptual clarification of what co-creation of value means or how implications for customers or managers can be provided (Grönroos & Ravald, 2011; Grönroos & Voima, 2012). To date there has been little agreement on how value is created, by whom and for whom (Grönroos & Ravald, 2011; Grönroos & Voima, 2012). Furthermore, to the researcher’s knowledge, there has been little empirical investigation on how organisations contribute to the process of co-creation, how customers collaborate with organisations to co-create service and how these processes are linked to the customer’s sole value creation process (i.e. value-in-use). This thesis aims to address these gaps.

## ***1.2 Research problem***

The emergence of the internet, which was accompanied by the birth of e-commerce, has impacted on humanity in the same way as the industrial revolution did in past generations (Al-Diri, Hobbs, & Qahwaji, 2007). Recent developments

in the industry of Information Communication Technologies (ICT) in general and self-service technologies in particular, help in creating new and various platforms for providing services to customers. This concomitant growth of the internet and self-service technologies contributes to the establishment of a multichannel service environment, which subsequently improves and diversifies the provision of services. However, the greater the increase in various types of self-service technologies, the greater the need for organisations to understand how customers feel about the given services and how they perceive value in using these services.

The growth of these technologies encourages customers to use multiple technological interfaces to interact with firms whenever and wherever they choose to do so. Customers' interaction via multi-face technologies was first described in multichannel shopping, which was accompanied by the birth of multichannel marketing (Rangaswamy & Van Bruggen, 2005). In particular, a diversification of multiple points of contact with customers for a given service enables organisations to provide a combination of information, products and service infused via different channels. However, adding new channels to existing ones increases the organisation's responsibility to provide a seamless blend of channels through which the customer can easily move and interact in a smooth and consistent way. This mission requires the consolidated efforts of all of the organisation's departments to interact seamlessly with customers via different channels, to satisfy their needs.

Recognising the importance of the internet and e-commerce in expanding the global economy has encouraged many countries to invest in the required infrastructure and to help organisations implement advanced technologies to expand their offers and diversify contact points with their customers. Saudi Arabia represents one of the most important ICT markets in the Middle East (Alfuraih, 2008). Banking organisations in Saudi Arabia are early adopters of the new technologies and already offer online banking services to their customers. Through implementing sophisticated technology interfaces, banks are able to enlarge their customer base, minimising transaction costs and therefore,

improving efficiency (Sohail & Shaikh, 2008). However, as the use of online banking increases, so does competition in the banking industry (Sohail & Shaikh, 2008). Most banks now provide multichannel service through which the same service is delivered to customers across different channels; what differentiates these services, is the customers' distinctive experiences. Specifically, a critical factor in determining the success of services offered by a company, is creating a distinctive customer experience (Verhoef et al., 2009). This has led to an increased interest in understanding customers' perceptions and feelings about multichannel services. This study adopts the banking context.

Furthermore, as a result of Saudi Arabia's recent accession to the World Trade Organisation (WTO), the intensity of competition among organisations has increased. This is because joining the WTO requires an open market that welcomes foreign banks into the country. Banks in Saudi Arabia have thus become pioneers in creating innovative ways to differentiate the services they offer, and continue to seek ways to improve the quality of these services through managing their customers' banking experiences. Given the importance of examining the management of services provided in a distinctive culture (Ostrom et al., 2010), it is noteworthy that Saudi Arabian society is characterised differently compared to other societies. First of all, the majority of individuals are Muslims which necessitates different cultural norms in terms of banking transactions, that are compliant with Islamic banking rules. The main distinguishing feature of the Islamic banking systems compared to the conventional banking system is the prohibition of 'Riba', which simply means interest. The second characteristic of this society that affects customers' banking experiences, is that it is conservative and dominated by traditions. For example, women in Saudi Arabia prefer not to have face-to-face contact with strange men (i.e. non-relatives) and as a result, banking organisations take into account their customers' needs and satisfies them by having bank branches allocated for females only. The final reason why the banking industry in Saudi Arabia needs to be explored, is that banks in Saudi Arabia are taking the initiatives to improve their services by providing more than one channel for customers to interact with their banks.

Consequently, it is of great importance to know if customers' interactions via different banking channels have a significant influence on their perceptions of value. Additionally, the cultural differences make the context of multichannel banking in Saudi Arabia a research environment that warrants investigation.

Considering the perspectives above, the major aim of the present thesis is to explore customers banking experiences in a multichannel context, through understanding the determinants of creating favourable customer banking experiences in Saudi Arabia. This aim means identifying different opportunities for customer value creation through customers' interaction with banks via different channels. Thus, the study investigates the means of value creation experiences across banking channels and the roles played by both banks and customers when collaborating in these experiences. After identifying the defining elements of this value creation experience, the project aims to test its subsequent effects on customer's perception of value-in-use and their likely outcome behaviours.

### ***1.3 Gaps in the literature and research questions***

This section first discusses the current literature in relation to value creation and how it is defined, created and by whom. Then, a brief discussion is offered as to the key gaps in the literature, followed by the main questions which this thesis aims to answer.

In early value creation literature, value was viewed as simply created in the organisation, and then exchanged with the customer; however, service literature has considered value as part of the service process (Grönroos, 1990), and according to the contemporary value creation concept, value is co-created by both the organisations and their customers (Prahalad & Ramaswamy, 2004). To support this argument, Sheth and Uslay (2007) noted that although value is determined by the customer, all value is jointly created. Hence co-creation is a fundamental concept and in the present study, customer co-creation is defined as:

customer participation in collaborative actions with firms, which are motivated by the customer's discretionary behaviours in order to customise the service experience and hence, to co-create service value. These actions include the basic actions to facilitate core service provision and/or the proactive actions that might go beyond the limits of the provided services (developed from Bolton & Saxena-Iyer, 2009; Lusch, Vargo, & O'Brien, 2007; McColl-Kennedy, Vargo, Dagger, & Sweeney, 2009).

In recent literature, Grönroos and Voima (2012) provide a slightly different analysis of the concept of co-creation. They argue that defining value creation as “an all-encompassing process, including activities by service providers, customers, and possibly also other actors, which leads to the unsupportable conclusion that everything is value creation and every one co-creates value” (p.25), hinders researchers to continue providing further analytical, theoretical and practical explanations. Furthermore, Grönroos and Voima (2012) conclude that value creation is better defined as customers' creation of value-in-use. Hence, they argue that the customers are value creators, with the co-creation experience as one aspect contributing to the overall value experience. Grönroos and Voima (2012) claim that their interpretation recasts the organisation's role as being a value facilitator by providing potential value; however organisations can only be value co-creators if they are invited by the customer during direct interactions. During this interaction, organisations can influence the customer value creation process in what they refer to as 'joint sphere' (Grönroos, 2011; Grönroos & Voima, 2012). When organisations (i.e. in this case, banks) are able to access the customer's value sphere (i.e. customer value creation or value-in-use independent from the service provider), a resultant joint value creation sphere is created (Grönroos & Voima, 2012). This debate highlights the need to identify opportunities for joint value creation and the potential role of both customers and organisations in the process.

Overall, when considering value, the emphasis needs to be on the customers' perspectives, rather than traditionally on firms' perspectives, because customers can better identify their needs and wants regarding available services, and they

are a good source of knowledge for banks (Ostrom, et al., 2010). However, the notions surrounding co-creation and the role of both customers and firms in joint and collaborative processes suggest that it is important to understand managers' views on how value creation opportunities occur. Thus, the main purpose of the first part of the present thesis is to explore how managers and customers act to co-create value, and consequently identify different opportunities of co-creation in a multichannel banking context. The first question guiding the current study is therefore:

Q1: How do banks and their customers work together (i.e. co-create) to produce value in a multichannel banking context?

Multichannel banking interaction in the current study is viewed as a set of interactions between a customer and multichannel banking (i.e. branches, online banking, ATM, call centres), which provoke a reaction. This experience is strictly personal and implies customer involvement at different levels (rational, emotional, sensorial, physical and spiritual). The assessment is based on what the customer expects compared to the stimuli generated from the interactions during different points of contact (developed from Gentile, Spiller & Noci, 2007). The increased number of contact points between customers and organisations has enhanced organisations recognition of the importance of effectively managing this live and growing environment (Neslin, et al., 2006). The emergence of multichannel services has encouraged organisations to unify their marketing strategies, policies and services across different channels to work in parallel, with a high level of service quality to satisfy customers' needs. The required coordination across all organisation departments enables them to ensure the uniformity of customer experience across different channels. The extant literature of multichannel marketing reveals that there is a lack of understanding as to the drivers and consequences of multichannel marketing (Rangaswamy & Van Bruggen, 2005). This gap hinders managers from understanding the factors that might influence customers during their journey of using multichannel services.

In this study, integration quality, a key determinant of multichannel service quality, has been selected as a factor that influences the customer co-creation experience. Integration quality is defined as “the ability to provide customers with a seamless service experience across multiple channels” (Sousa & Voss, 2006, p. 365). While integration quality emerges from the literature, it is necessary to examine customer banking experiences to identify other potential antecedent factors that might affect those experiences, i.e. when customers interact or co-create with the bank. Once different opportunities of co-creation have been identified (Research Question 1), the second question seeks to identify antecedent factors that might influence customers in their experience of co-creation. Thus, the following second research question is investigated:

Q2: What antecedent factors influence the co-creation experience in a multichannel banking context?

Once the factors impacting customers’ co-creation experiences have been identified, an investigation of the consequences of co-creation experiences is necessary to explore how those experiences contribute to value. The current debate in the literature on what constitutes value creation, or value-in-use, and how it emerges in different contexts, has attracted the attention of both academics and practitioners. Several attempts have been made to interpret the concept of value-in-use as being generated based on either consumption or usage (Grönroos, 2008; Grönroos & Ravald, 2011), resource integration (Vargo, 2008), or simply as an improvement to the service system well-being (Vargo, et al., 2008).

The dominant feature underlying most of the definitions of value is the usage or consumption process on which value is based. Grönroos (2008) defined value-in-use as simply being a state where “customers become better off in some way after involving in a self-service process (e.g. withdrawing a cash from ATM machine) or a full service process (withdrawing cash over the counter in a bank)” (p.303). In a subsequent study, Grönroos and Ravald (2011) re-emphasised the concept as being “an interactive usage process through which the customers become better off as subjectively judged by the customer” (p.8). In addition to

that, the current literature emphasised that customers engaged in different spheres of value creation: the joint sphere where co-creation normally occurs and the customer sphere where no direct interactions with firms takes place; “where value-in-use (real value) emerges (is created) through the user’s accumulation of experiences with resources and processes (and their outcomes) in social, physical, mental, temporal and/or spatial context” (Grönroos & Voima, 2012, p.10). However, limited studies have investigated how value-in-use is measured (Vargo, et al., 2008) or how customers create value-in-use (Grönroos & Voima, 2012). To the researcher’s knowledge, limited studies have attempted to measure value-in-use as generated from customers’ interactions with multichannel banking, and there are no such reported studies on Saudi Arabia. Hence, the current study will contribute to the continuing debate of the S-D logic and service logic regarding the concept of value-in-use by answering the following third research question:

Q3: What constitutes overall value (value-in-use) for customers in relation to multichannel banking?

Once the dimensions have been extracted that constitute value-in-use as perceived by the multichannel banking customer, the possible relationship between the customer co-creation experience and value-in-use must be tested. A large and growing body of literature has investigated the influence of customer participation in service delivery and service recovery on their perceptions of value-in-use (Heinonen, 2009) and perceived value of future co-creation (Dong, Evans & Zou, 2008). On the other hand, to the researcher’s knowledge, very little literature has explored the impact of customer co-creation experience on their perception of value-in-use during their multichannel banking interaction. In recognition of this gap, this research explicitly tests the influence of the dimensions of customer co-creation experience on the dimensions of value-in-use. In addition to that, the extant literature addresses the likely importance of the relationship between customer value co-creation experience and customer outcomes (Ostrom, et al., 2010). Customer outcomes are frequently measured in terms of loyalty and/or commitment. These constructs are related and sometimes overlap (Dean, 2007). In general loyalty reflects actual behaviours or intended

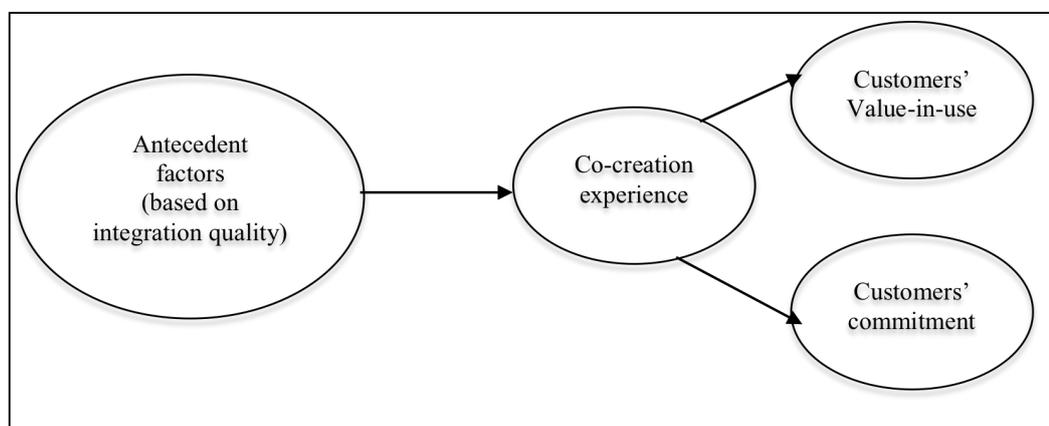
behaviours, while commitment provides an assessment of customers' feelings towards remaining a customer, and the rationale for those feelings (Dean, 2007). The current study adopts commitment as the outcome response. Hence, the final aim of the current thesis is to investigate, and ultimately test, the relationship between the elements of the customer co-creation experience with customers' commitment to their banks. Hence, the two final research questions guiding the study are:

Q4: How does customers' co-creation experience influence their perceptions of value-in-use?

Q5: How does customers' co-creation experience influence their commitment to their banks?

In summary, this study has three major aims. First, to extract the meaning and defining elements of the customer co-creation experience and to discover antecedent factors influencing this experience (Research Questions 1 and 2). The second major aim is to explore customers' perceptions of value in using different banking channels, and to measure these perceptions empirically (Research Question 3). The third major aim is to empirically test proposed links between the dimensions defining customers' co-creation experience, their perception of value (i.e. value-in-use) and likely behavioural outcomes in terms of on-going commitment to the bank (Research Questions 4 and 5). Figure 1.1 displays an overview of the main conceptual areas guiding the current study:

**Figure 1.1: Overview of conceptual areas guiding the project**



A summary of the definitions used in the study are displayed in Table 1.1 (below):

**Table 1.1: Definition of the key constructs**

<b>Key terms</b>	<b>Definition</b>	<b>Sources</b>
<b>Integration quality</b>	“The ability to provide customers with a seamless service experience across multiple channels.”	Sousa and Voss, (2006, p. 365).
<b>Multichannel interaction</b>	As a set of interactions between a customer and multichannel banking (i.e. branches, online banking, ATM, call centres), which provoke a reaction. This experience is strictly personal and implies customer involvement at different levels (rational, emotional, sensorial, physical and spiritual). The assessment is based on what the customer expects compared to the stimuli generated from the interactions during different points of contact.	Adapted from Gentile, Spiller and Noci (2007).
<b>Co-creation experience</b>	Customer participation in collaborative actions with firms, which are motivated by the customer’s discretionary behaviours in order to customise their service experience and hence, to co-create service value. These actions include the basic actions to facilitate core service provision and/or the proactive actions that might go beyond the limits of the provided services.	Developed from Bolton and Saxena-Iyer (2009); Lusch et al., (2007); McColl-Kennedy et al., (2009).
<b>Value-in-use</b>	Value-in-use is customers’ cognitive evaluation of the value generated during their use of resources and processes and their outcomes; usage can be physical, virtual, mental or a mere possession.	Developed from Sandström, Edvardsson, Kristensson and Magnusson (2008); Grönroos and Voima (2012).
<b>Commitment</b>	“A psychological desire-based attachment to the service provider, reflected by the strength of the customer’s identification and involvement with that provider.”	Developed from Porter, Steers, Mowday and Boulian (1974, p. 604).

## ***1.4 Methodology***

### **1.4.1 Project design**

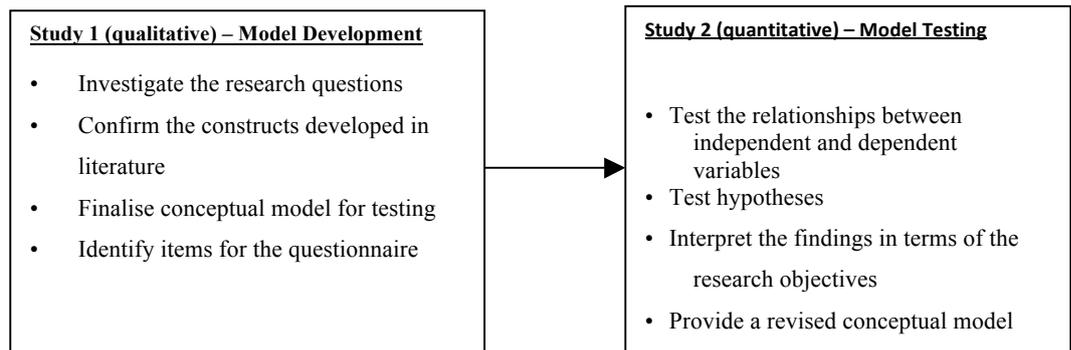
A mixed method design of two sequential studies is proposed to answer the research questions and to test the conceptual model. The studies are Study 1 (Qualitative) and Study 2 (Quantitative). Study 1 is entitled ‘Managers’ perceptions and Customers’ feelings about multichannel service experiences in the banking industry in Saudi Arabia’. Study 2 is entitled ‘Customers’ co-creation experiences in a multichannel context: interaction experiences and outcomes’. The main purpose behind the use of the mixed method research design is attributed to the exploratory nature required for the first study, and the quantitative approach needed to test the model in Study 2. Study 1 necessitates a preliminary exploration of themes for the following reasons:

- The research questions developed from the literature review initially seek insights and meaning with respect to the major variables in the context of multichannel banking in Saudi Arabia.
- The consistency of conceptual understanding of the core constructs (i.e. customer co-creation experience, integration quality and value-in-use) needs to be checked with previous studies.
- Some of the core constructs mentioned in the above point do not have well developed measures; hence the qualitative data is necessary to inform the questionnaire for Study 2.
- The model developed from the literature may need to be refined for further testing in Study 2, because Saudi Arabia is a new context for application.

In summary, the rationale underlying the two-phase, sequential mixed method approach is first to explore participants’ experiences and feelings. In particular, the first study demonstrates a qualitative exploration of managers’ and customers’ perspectives about co-creation in multichannel banking, as explained by them in their own words, to extract the meaning and different opportunities of value co-

creation. Second, the information obtained from Study 1 is used with the literature to develop and test specific relationships. Figure 1.2 summarises the phases:

**Figure 1.2 Phases of the project**



### **1.4.2 Methods**

To answer the study's main questions, face-to-face interviews are undertaken in Study 1, due to their ability to reveal extensive and complex information from participants (Cavana, Delahaye, & Sekaran, 2001). The sampling frame for Study 1 is composed of two groups: bank managers and banking customers within two banks in Saudi Arabia. The sample of managers includes executive, marketing and branch managers, whereas the sample of customers targets banking customers who have recently used multichannel banking. Based on the results of Study 1, the model for testing is finalised, and measures of the focal constructs are developed to construct the questionnaire for Study 2.

Selection of participants for Study 2 is based on customers who have previous experience with multichannel banking, ascertained by a paper-based questionnaire. Volunteering managers in each of five banks are asked to invite a random sample of potential participants while they are waiting to be served at branches. The data generated from Study 2 are analysed through a two-stage procedure. The first step uses principal component analysis (PCA) and reliability

analysis to provide a preliminary refinement of the measures, followed by the second step of employing structural equation modelling (SEM) using AMOS to conduct confirmatory factor analyses (CFA) and to test the measurement and structural models.

### ***1.5 Theoretical contributions***

This thesis contributes to the current development of theory with respect to service logic and S-D logic, and increasing multichannel use in banking in the context of an Islamic culture and a developing economy. It does so by first providing a review of existing literature with special reference to value creation, co-creation and customers' interaction experiences, and the likely consequences of these areas with respect to customer co-creation experience and value-in-use. Second, the project provides qualitative insights into different perspectives on value co-creation in multichannel banking and customer perceptions of value in using different banking channels. Third, it tests proposed relationships between key variables. In doing so, it incorporates and empirically tests the links between the construct of integration quality first introduced by Sousa and Voss (2006), the co-creation experience construct developed for the study, and the outcome variables of value-in-use and commitment.

In making these contributions, three major gaps that need to be resolved emerged from the current literature. Firstly, the extant literature reveals limited empirical research with respect to exploring the meaning and role of parties involved in the co-creation experience, as well as investigating the factors that influence the co-creation experience and its outcomes. Secondly, within the extant literature, great emphasis has been placed on customer perceptions of value-in-use and the debate continues about what it means and by whom it is created. To date, there appears to be no empirical measurement of this concept. To the researcher's knowledge, there has been little empirical investigation to extract co-creation opportunities that emerge during multichannel banking interactions, and consequently to measure the co-creation experience as a construct from the customer's perspective. In addition to that, no empirical research has been found that

investigates the influence of the quality of integration on the co-creation experience. The present thesis, however, makes several noteworthy contributions by providing a measurement scale for the concepts (i.e. co-creation experience and value-in-use) followed by empirical testing.

More specifically, the current findings add to a growing body of literature and to an ongoing critique on value-in-use, by defining the dimensions of it in relation to retail banking, in a context with cultural and societal differences. Moreover, the findings of the present thesis provide additional empirical testing with respect to the mediating role of co-creation experience in relation to other constructs (i.e. integration quality, value-in-use and commitment) as well as to the relative importance of co-creation experience and value-in-use defining elements.

Thirdly, the findings of the study provide additional evidence with respect to the role of integration quality as an antecedent factor impacting customers' co-creation experiences. This finding also contributes to the service quality literature by emphasising the influence of integration quality on customers' perceptions of value-in-use and their commitment to their banks. In addition to that, the findings of the current study provide contradicting evidence for the value-commitment relationships and contribute additional detail and evidence in terms of the previous well established links. Finally, much of the conducted research is limited to western and developed countries; to the researcher's knowledge, the current study will be the first study to explore the antecedents and consequences of customer co-creation experience and customers' perceptions of value-in-use in the retail banking industry, in a culturally different context such as Saudi Arabia.

### ***1.6 Practical contributions***

The findings of the present project should be of great significance to banking managers, as these will provide them with a deeper understanding of customers' perceptions of multichannel banking experiences, which contribute to their creation and perception of value. More specifically, the findings of the current thesis shed light on how customers create value when using different banking

channels, and what the main areas of interaction are that make customers more accessible and amenable to collaborate with their banks to create more value. Findings of this study should enable managers to identify the situations in which customers become more responsive to interact with the bank, and hence how managers can utilise these situations to interact more successfully and create mutual value.

Additionally, the project will contribute to managers' understandings of the influence of each element of the co-creation experience with reference to customers' attachment (commitment to the bank) and perceptions of value (value-in-use). More importantly, understanding how each element of co-creation experience contributes to different dimensions of customer value-in-use is of great significance to increasing customer value. Furthermore, findings from this study enable managers to understand which elements of co-creation experience contribute more to increasing customer commitment to the bank. More importantly, among the most intriguing findings is the critical role of integration quality as the most influential factor in all main key constructs (co-creation experience, value-in-use and commitment); this justifies banks' desires to improve and invest in advanced information technologies to capture 'a single view of a customer'.

Another important practical implication is that banks must encourage co-creation, as this is positively associated with all values desired by the customers and the bank. For instance, banks should encourage customer collaboration with banks to solve their problems by providing incentives (e.g. gift vouchers, fees exemptions). Investing in supporting and improving co-creation is worthy of every effort.

### ***1.7 Delimitations***

The scope of this study is limited to five banks in the context of Saudi Arabia. Furthermore, the study targets a random sample of customers who are assumed to be representative of the population, but generalising these findings to other

cultures or contexts is not recommended. The major purpose of the study is to test relationships between proposed factors influencing customers' co-creation experiences in a multichannel context, and its applicability in this context only. Finally, as the method depends on a specified model, and although every care has been taken to develop a comprehensive model, it is possible that there might be other factors impacting upon the customer co-creation experience, which are not tested in the project.

## ***1.8 Thesis Structure***

This thesis is divided into seven chapters as displayed in Figure 1.3 (below).

### **Chapter 1: Introduction**

This brief introductory chapter discusses the research problem and introduces the research questions. A short explanation of the adopted methodology is included. Chapter 1 also presents the theoretical and practical contributions and the delimitations of the study.

### **Chapter 2: Literature review**

This chapter reviews the extant literature in relation to the main areas under investigation. It also demonstrates where the research questions emerge from and proposes two competing models.

### **Chapter 3: Methodology**

A detailed description of and justification for the methodology is provided in Chapter 3. It precisely describes research procedures, design and methods of analysis for both Studies 1 and 2.

### **Chapter 4: Study 1 - Findings analysis of the qualitative study**

This chapter discusses the findings and analysis of the qualitative study and concludes with an explanation of the implications of Study 1 for Study 2.

### **Chapter 5: Testing and validating co-creation measurement**

The findings of the exploratory and confirmatory factor analyses are reported in this chapter.

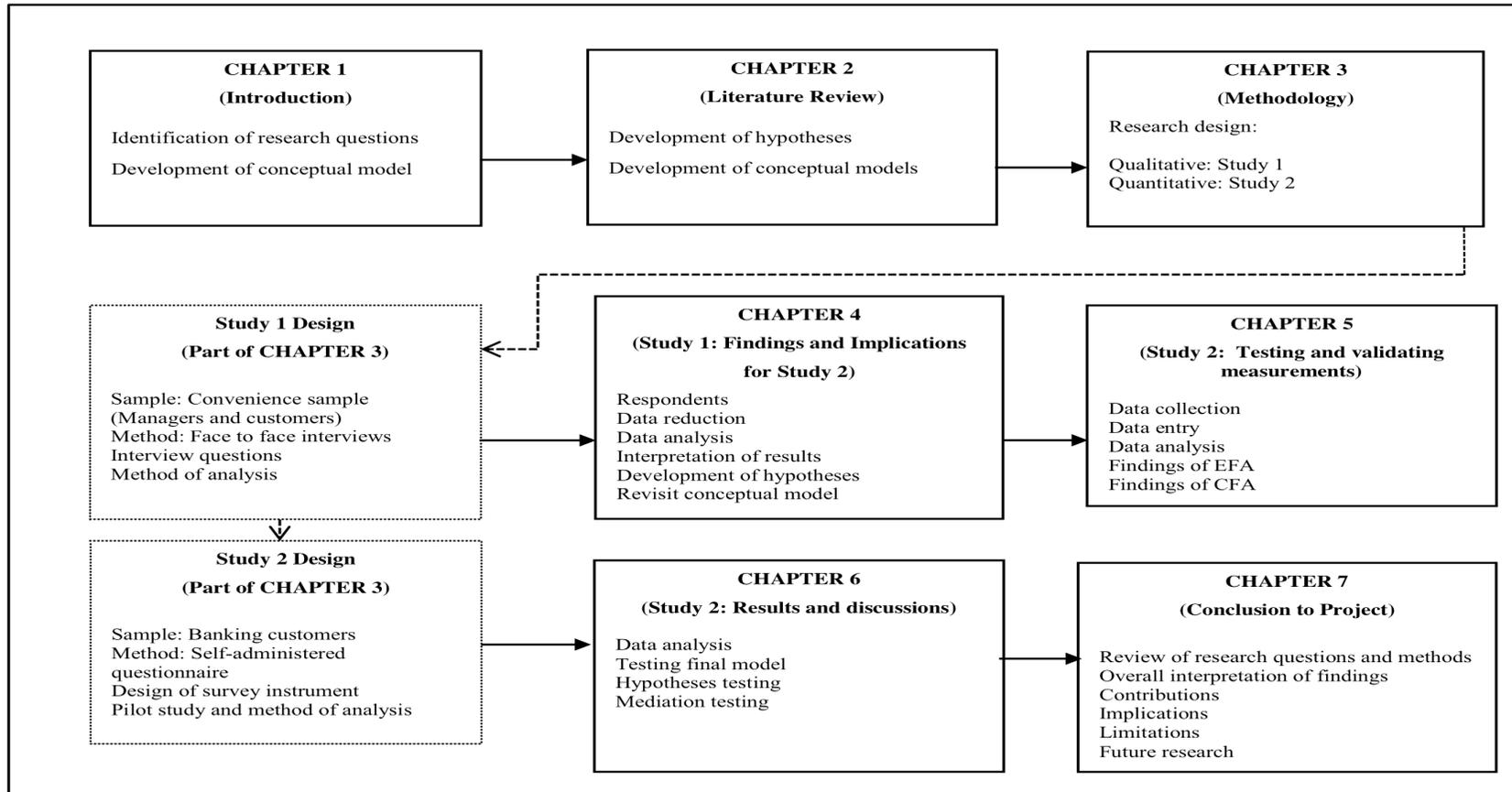
### **Chapter 6: Testing structural model**

This chapter reports the testing of the structural model and interprets the results of Study 2.

### **Chapter 7: Project conclusion**

This chapter reviews the research questions and presents an overall interpretation of findings, research contributions, practical implications, limitations and suggestions for future research.

Figure 1.3: An overview of the chapters and the research process (Marimuthu,2007)



## **Chapter 2 : Literature review**

### ***2.1 Introduction***

In the current literature, the two logics which represent the marketing discipline are goods-dominant (G-D) and service-dominant (S-D) logic. G-D logic represents a conventional conceptualisation of the economic exchange in which goods, more recently “products”, act as the focus of attention (Vargo & Lusch, 2008a). The core meaning underlying this logic is that value is locked into products when they are first produced (Vargo & Lusch, 2008a). In contrast, S-D logic stands for a paradigm shift from the traditional, foundational G-D logic, to a new logic representing services as the principal point of focus (Vargo & Lusch, 2006). In essence, the focal concept underlying this S-D logic highlights competences and knowledge as the major units of exchange (Vargo & Lusch, 2006). In specific terms, the logic basically demonstrates the customers’ ability to collaborate in the co-creation of value, and the emphasis is on the exchange of customers’ knowledge and skills with suppliers to maximise value. Consequently, the customer becomes the final “arbiter of value co-created through direct interaction with suppliers, and most importantly, the arbiter of value-in-use derived from interaction with goods and other physical resources” (Ballantyne, Frow, Varey & Payne, 2011, p. 203).

The major purpose of the current study is to understand the meaning and outcomes of co-creation as generated from customer-bank interaction via multichannel banking. Hence, this chapter presents a thorough review of the literature in terms of S-D logic, the customer service experience, customer-supplier interactions, value creation and co-creation, quality in multichannel banking, value-in-use and customer responses (i.e. commitment). Throughout this chapter, the research questions are identified and the chapter concludes with a preliminary model for confirmation and testing.

Before proceeding to the review of literature concerning value, it is important to note that the project uses the context of multichannel banking. The use of multiple channels has resulted in new channels and services, either stand alone or complementing physical services, and has been accompanied by the emergence of multichannel users. Multichannel users are customers who tend to use more than one channel for the required service. Customers utilise multichannel services at different stages of their shopping decisions to conduct transactions at their convenience, with respect to time and space (Rangaswamy & Van Bruggen, 2005). The increased use of multichannel shopping has attracted researchers' desire to understand this phenomenon, and has been accompanied with the birth of multichannel marketing. However, few studies discuss consumer behaviour in terms of multichannel shopping (Kumar & Venkatesan, 2005); for example, the determinants of customers' channel choice at different stages in the shopping decision making process (Balasubramanian, Raghunathan, & Mahajan, 2005).

Exceptions include Dholakia, Zhao and Dholakia (2005), who investigated customers' attitude towards using the internet as a new channel. The authors found that customers tended to use the new channel in conjunction with the existing ones, rather than ignoring the latter. The study also found that customers were loyal to the existing channels for repeat purchases (Dholakia et al., 2005). Kumar and Venkatesan (2005) contributed to the multichannel marketing literature by building a conceptual framework investigating customers' characteristics in terms of their multichannel buying behaviours. They found there was a positive result for multichannel shopping when customers interacted via different channels, and that multichannel shoppers are more active customers and a source of maximised revenue, share of wallet, and customer value. Consequently, the increased adoption of multichannel services, and its positive outcomes, highlights the importance of understanding these.

## ***2.2 Service dominant logic***

The concept of S-D logic emphasised by Vargo and Lusch (2004, 2008b) contributes to literature in two key ways. The first contribution is the

development of ten foundational premises (FPs), which represent the prime focus of the new S-D logic, to facilitate in understanding the contemporary marketing phenomena. These premises include FP6 – “the customer is always a co-creator of value” (Vargo & Lusch, 2008b, p.7), and FP10 – “value is always uniquely and phenomenologically determined by the beneficiary” (Vargo & Lusch, 2008b, p.7). In particular, the FP6 premise was first presented as “the customer is always a co-producer”, which has been changed following the authors’ own realisation that “the customer is always a co-creator of value” (Lusch & Vargo, 2006; Vargo & Lusch, 2006). The authors, based on the suggestion of several marketing scholars, attributed this change to the fact that “co-production” represents the concept of G-D logic.

The second contribution is distinguishing between operand and operant resources. Operand resources (e.g. customers’ banking accounts) are those “upon which an operation or act is performed to produce an effect” (Vargo & Lusch, 2004, p.2). However, operant resources (e.g. bank employees’ knowledge and skills) are used to operate on operand resources and other operant resources (Vargo & Lusch, 2004). Operant resources are characterised to be active, changing and absolute, rather than constant and finite (Vargo & Lusch, 2004); however, abstract and inconspicuous are among the features describing operant resources. Based on this distinction, S-D logic emphasised the importance of operant resources as being the primary source of generating effects. In particular, customers themselves provide and use operant resources. Further, the ongoing reviews of the S-D logic premises reveal the critical role of service provision, which intrinsically produces value and positions the customer as the primary evaluator of created value. Several paramount characteristics can be inferred from S-D logic including coordination, integration and collaboration; each highlights *co-creation of value* as the crux of exchanged transactions.

The scholars of the Nordic School of Service Management have continued to debate the theoretical foundation of S-D logic. Grönroos (2011) and Grönroos and Voima (2012) argued that, despite the importance of advancing the concept of customers as co-creators of value, as demonstrated in FP6 mentioned above, S-

D logic does not clarify what is meant by value creation and co-creation. More specifically, the S-D logic approach to defining value creation and co-creation does not differentiate between the two concepts, the different roles played by the main parties in the value creation process. Moreover, the premises were alleged to be too simple and abstract to further improve the logic, theoretically or practically (Grönroos, 2011). Consequently, critical revisions of the S-D logic's main premises carried out by Grönroos (2011) and Grönroos and Ravald (2011) were emphasised. According to this school of thought, the rationale for FP6, "the customer is always a co-creator of value", can only be accurate if the customers join in this activity with another party (co-create). Hence, Grönroos (2011) provides a revised version of this statement: "the customer is always a value creator". Commenting on FP10, Grönroos (2011) emphasised that this statement is complete only when considering value as an experientially accumulating process "dependant on customers' global experiences" (p. 293). Hence, the revised premises emphasised that customer value is accumulated over time and individualised, and "experientially and contextually perceived and determined by the customer" (Grönroos, 2011, p. 293). In summary, the recent contribution by the Nordic School emphasises the importance of customer experiences in determining overall value and the opportunity co-creation processes afford to firms.

The Nordic School have long recognised that services are processes. Grönroos (2000) defines services as "processes that consist of a set of activities which take place in interactions between a customer and people, goods and other physical resources, systems and/or infrastructures representing the service provider and possibly involving other customers, which aim at solving customers' problems" (p. 46). Later, the same definition was modified to emphasise the ability of services to assist customers' everyday practices. Normann (2001) also defined services as "activities (including the use of hard products) that make new relationships and new configurations of elements possible" (p. 114). According to Grönroos's classification (2008) of service, three different aspects are used in considering service as an activity (Grönroos, 2006). First, it is necessary to explain what a service should do for the customer, second the service should be viewed as a step

in creating value for customers, and the third aspect defines the service as a perspective on the provider's activities (business logic) (Grönroos, 2006). According to S-D logic, as articulated by Vargo and Lusch (2008b, p. 7), FP1 states that "service is the fundamental basis of business"; Grönroos (2011) emphasised that service is acting as a mediator in the process of value creation, because it generates reciprocal value. Accordingly, the present study explores aspects of services that facilitate value co-creation, including both the customer and firm perspectives, but with more emphasis on customers, because they are in the best position to articulate their needs and wants.

S-D logic (and the service logic of the Nordic School) appears to be of great importance in marketing theory, because it provides a holistic scope for joining different parties to mutually and collaboratively exchange services which engenders co-created value. This logic is described as "philosophically grounded in commitment to collaborative processes with customers, partners and employees" (Lusch, et al., 2007, p. 5). Hence, the current study uses S-D logic as its major theoretical foundation and is supported by the literature to develop and achieve its major objectives. Considering the importance of the original FP6 and FP10 presented by Vargo and Lusch (2008b) and the revised versions (Grönroos, 2011), the study explores customers' co-creation experiences in a multichannel banking context and focuses on the opportunities and the factors that are likely to influence these experiences. This theory of service underlies the present project and is now discussed in more detail.

### **2.2.1 The concept of value co-creation**

The exchange phenomenon has arguably been the prime focus of marketing for many decades (Sheth & Uslay, 2007) and has been considered the focal construct for the study of marketing (Bagozzi, 1975). Only recently, is there a growing argument that the focus has to be shifted from the dominant paradigm of exchange towards the value-creation concept (Sheth & Uslay, 2007). Similarly, the exchange paradigm's limited ability to provide a comprehensive view of the marketing phenomenon, such as the relational engagement of firms, has been

argued by marketing scholars such as Grönroos (1990), Webster (1992) and Sheth and Uslay (2007). Thus, the concept of value creation has become of great interest recently as a surrogate for the exchange paradigm and as a core construct in S-D logic (Vargo & Lusch, 2004, 2008b). It also has been used in literature either to describe other behaviour (i.e. focus on sellers' design of marketing strategy) (Vargo & Lusch, 2004) or to explain some aspects of customer behaviour (Lam, Shankar, Erramilli, & Murthy, 2004).

Based on the S-D logic view, value creation is perceived as a co-creation activity performed by a firm and its customers (Vargo et al., 2008), and it occurs only when customers use goods or services (Grönroos, 2008). In particular, value is co-created when all parties (i.e. organisations, employees, customers, stakeholders and government agencies) unify their efforts and focus on the customer as the unique determinant of value (Vargo et al., 2008). Lusch et al. (2007) differentiate between co-production and co-creation as two components of collaboration (Lusch et al., 2007). Co-creation is the first and most comprehensive component of collaboration which emerges during a direct mutual relationship (e.g. between the provider's and customer's) or is mediated by goods and other value-creation parties (Lusch et al., 2007). Co-production is about contributing to the construction of the main offering itself, i.e. filling a role to facilitate the service delivery, or some extension of that activity. In other words, co-production typically recurs as "shared inventiveness, co-design or shared production and can occur with customers and any other partners in the value network" (Lusch et al., 2007, p. 11).

In essence, co-creation and co-production are concepts that converge to a degree that allows co-creation to superordinate co-production and with similar implications compared to the relationship between service and goods in S-D logic (Lusch & Vargo, 2006; Lusch et al., 2007). In addition to that, Bolton and Saxena-Iyer (2009) contribute to literature by differentiating between co-production and co-creation. According to them, co-production is defined as "customer participation within organisation-defined parameters" (Bolton &

Saxena-Iyer, 2009, p.93), whereas co-creation is viewed as “customer participation motivated by discretionary behaviours which uniquely customise the service experience (beyond the selection of pre-determined options)” (Bolton & Saxena-Iyer, 2009, p. 95).

Among the pioneers to conceptualise the concept of co-creation are Prahalad and Ramaswamy (2004). Their work describes the transition from the traditional firm-centric view of deciding what customers perceive as value to the customer-centric view which supports the active role of customers deciding what is of value to them. Their work is useful and comprehensive as it describes what is meant by co-creation. According to their classification, co-creation involves the following as adapted from (Prahalad & Ramaswamy, 2004, p. 8):

- Cooperative efforts by the organisation and their customers to create value
- Enabling the customer to collaboratively frame the service experience to meet the exchanging context
- Cooperative efforts by the organisation and their customers to define the problems and solve them jointly
- Enabling the customers to carry on active and continuous dialogue to facilitate personalised experiences
- Enhancing experience variety and customised experience
- Constructing innovative environments to support new co-creation experiences

In addition to scholars discussed in later sections, Prahalad and Ramaswamy (2004) emphasise the idea of the consumer experience, and the current study asserts that co-creation is an experience that contributes to value. Hence, as mentioned in chapter 1, *the co-creation experience* is defined as customer participation in collaboration with firms; this collaboration is motivated by the customer’s discretionary behaviours that customise the service experience and hence, co-create service value. These include the basic actions to facilitate core service provision and/or the proactive actions that might go beyond the limits of

the provided services (developed from Bolton & Saxena-Iyer, 2009; Lusch et al., 2007; McColl-Kennedy et al., 2009).

### **2.2.2 The importance of customer experience**

The concept of customer experience appeared in academic literature in the mid-1980s when it was first introduced by the influential paper of Holbrook and Hirschman (1982); they claimed that consumption has experiential aspects which the customer perceives in a multi-sensory mode. The emphasis was on the “role of emotions in behaviours;...consumers are feelers as well as thinkers and doers...the roles of consumers, beyond the act of purchase, in product usage as well as brand choice” (Addis & Holbrook, 2001, p. 50). Through their work, these scholars contributed two seminal achievements. First, they focussed on the need to investigate the consumption experience as a whole, starting from pre-purchasing through to discard or final outcomes. Second, they emphasised emotions as a core aspect of consumption (Tynan & Mckechnie, 2010).

Moreover, Pine and Gilmore (1998) contributed to experiential marketing by the introduction of experience as a process that should develop through different stages, starting by constructing positive impressions in the customer’s mind, incorporating customer experience with memorabilia and involving customer senses to create a memorable experience. Schmitt (1999) investigated the method that firms follow in order to create experiential marketing through customers’ sensory, emotional and cognitive reactions towards the company and its brand. Thus, the literature emphasises the importance of customer experiences in creating value for both customers and companies (Sandström et al., 2008; Tynan & Mckechnie, 2010). According to Gentile et al. (2007), customer experience is defined as:

The experience generated from a series of interactions between different parties (e.g. customer, a product, a company, or part of its organisation) which motivate a reaction. This experience is individual and implies customer’s

engagement at different levels (rational, emotional, sensorial physical and spiritual). Its evaluation depends on the comparison between a customer's expectations and the stimuli coming from the interaction with the company and its offering in correspondence of different moments of contacts or touch points (p. 397).

In a similar way, Patrício, Fisk, and Cunha (2008) emphasised the importance of viewing services as experiences in service design improvement. Based on this perspective, service experience is defined as “the outcomes of the interactions between organisations, related systems/processes, service employees and customers and are enabled by a set of clues provided by goods, services and atmospheric stimuli, which can be functional or emotional” (Patrício, et al., 2008, p. 320). Accordingly, customer experience is the result of the sum of what is provided (i.e. outcome of product or service) and how it is provided, as represented in the process and context of use and the emotional elements of reciprocity (Patrício, et al., 2008).

Recent schools of thought have emphasised the importance of customer experiences in creating value for both customers and companies (Addis & Holbrook, 2001; Carù & Cova, 2003; Prahalad & Ramaswamy, 2004). Customer experience is considered as a whole and involves all moments of interaction between the customer and the company or an offer. Current literature on value creation also emphasises that value is generated from individuals' experiences (Helkkula, Kelleher, & Pihlström, 2012; Ramaswamy, 2011). Ramaswamy (2011) argued that customer experience is the focal point to “enterprise value creation, innovation, strategy and executive leadership” (p. 195). Ramaswamy (2011) also indicated that the market becomes a forum in which individuals outside the organisations contribute to the value creation process of these organisations. Accordingly, the experience of the interactions between organisations and individuals that co-create value becomes the new basis of value. Hence, the present study focuses on holistic customer banking experiences based on their interactions with multichannel banking (i.e. customer responses to a

service situation) as a guide to explore the meaning of co-creation and to extract co-creation opportunities that might exist in a banking context.

### **2.2.3 The critical role of interaction**

The importance of interaction has been widely discussed by scholars within different fields of research such as relationship and service marketing. Its importance lies in either co-influencing derived value in a customer value generating process (Grönroos, 2008), being a driver for co-creation (Ballantyne & Varey, 2006) or creating opportunities for value creation and extraction (Prahalad & Ramaswamy, 2004). The concept of interaction has been interpreted differently across disciplines (Duncan & Moriarty, 2006). By way of explanation, traditional marketing views interaction as a transaction or exchange, while communication interprets interaction as a conversation or dialogue, and relationship marketing considers interaction a way of building a collaborative relationship with a customer (Duncan & Moriarty, 2006). Interaction is also defined as the process of building a mutual relationship with a customer through conversation or dialogue (Duncan & Moriarty, 2006). The importance is reflected in the change of focus from tangibles to intangibles as the basis of economic value, which has been articulated through the first premise of Vargo and Lusch (2004) and argued by Berthon and John (2006), who emphasised interaction, as the very fabric of exchange. Their argument was based on considering interaction at the root of the S-D logic in marketing and as an essential enriching factor to intensify any reciprocal relationship. Berthon and John (2006) argue that without interaction no information can be exchanged, no knowledge can be generated, and no service can be co-designed or co-created. Consequently, they call for the importance of emphasising the *interaction* between the entities (i.e. customer and firm) rather than focusing on the entities themselves. Berthon and John (2006) propose that the total value of an offering is composed of two value components: interactive and non-interactive. That is:

$$V \text{ total} = V \text{ non-interaction} + V \text{ interaction}$$

An example of the equation occurs when non-interaction value stands for the customer's everyday browsing of a bank's website to look for information regarding customer services; these are related to the financial market, retail and corporate banking, the use of search engines, news articles or publications. However, interaction value resembles the extent to which the website provides delivered services, support, advice, complaints handling and assistance such as ordering a bank statement or chequebook via e-mail. In other words, interactive value is a result of interaction between the bank and the customer via online banking. Thus, the non-interactive value component is the value created during the customer's own value creation process, whereas the interactive value component is the stage where the customer-firm interaction influences the value that is created within the customer's sphere (Grönroos, 2008).

Ballantyne and Varey (2006) emphasise the importance of customer-firm interaction in leading to co-creation as being the generator of value-in-use and service experience. Grönroos (2009) also accentuates the impact of interaction in influencing customer's perceptions of quality and consequently value-in-use. Accordingly, interaction is defined as an action where two or more parties are involved in contact, and hence reciprocally or mutually influence each other (Grönroos, 2011; Grönroos & Ravald, 2011). Grönroos and Voima (2012) claimed that interaction is the core of the 'joint sphere' in which the two parties co-influence each other, and can be either direct or indirect. Grönroos and Voima (2012) emphasised that only during direct interactions with customers in the joint sphere, can organisations access customers' closed area (i.e. customers create value independently), and hence joint value co-creation opportunities arise. Given the importance of interaction as a platform for value co-creation, the current study aims to explore customer-bank interaction experiences, during which a direct interaction between banks and their customers is taking place through multiple contact points (i.e. branch services, online banking, phone banking and ATMs).

To emphasise the importance of interaction as a crux of co-creation, many theoretical studies have been published (Grönroos & Ravald, 2011; Grönroos &

Voima, 2012). For example, Tynan and Mckechnie (2010) indicated that value is created through “the application of skills and knowledge, is facilitated through interaction, is predicated upon co-creation, accepts the requirements for customer participation, is determined by the customer, affirms the concept of value-in-use over that of value-in-exchange, and thus addresses many of the key features of experience marketing” (p. 508). Berthon and John (2006) also argued that value is recognised through the customer’s interaction experience with an offered service. Interaction is accepted as a defining characteristic of all services (Bolton & Saxena-Iyer, 2009), and this is usually attributed to the simultaneous nature of production and consumption processes, which act as key processes within any type of service, and/or the need for customer input into service delivery. Grönroos and Ravald (2011) and Grönroos and Voima (2012) argued that co-creation cannot occur without interaction between two or more parties that impacts on both. Grönroos and Voima accentuate the critical role that interaction plays as “a platform for joint co-creation of value” (2012, p.9). Based on S-D logic, Gummerus (2011) argued that customers’ value co-creation can be classified under two categories: co-creation as interaction, and co-creation as interpretational frame (Gummerus, 2011). The former relates to what is done whereas the latter corresponds to what is perceived as outcomes.

Moreover, Berthon and John (2006) focus on the value-in-use or experience value of the interaction. Experience is considered a result of an interaction between firms and their customers. As such, interaction is crucial to experience creation and based on the fact that no two experiences are identical. Grönroos (2000) further stresses that customer value is created through “the relationship by the customer, partly in interactions between the customer and the supplier or the service provider” (p. 24). Given that interaction is pivotal in value co-creation and “experiences come from interactions” (Ramaswamy, 2011, p. 195), exploring the roles of different parties involved (i.e. banks and their customers) in the process of co-creation and the sphere in which value co-creation opportunities emerge, requires a deep understanding of interaction (Grönroos & Ravald, 2011). Hence, this project’s research problem highlights the importance of understanding the roles of different parties (banks and their customers) involved in co-creating

value, resulting from their interaction with multichannel banking services, which contribute to identifying value co-creation opportunities.

### ***2.3 The emergence of the focal theory of value co-creation***

The shift of thought towards value co-creation has been accompanied by a change of thinking about different roles played by organisations and customers. Traditionally, an organisation or a producer acts as a mere developer or deliverer of goods and services, while the customer acts as the one who consumes these goods and services. To emphasise the point, distinction and separation are the dominant features of these roles (Vargo & Lusch, 2004).

The recent shift from the exchange paradigm to the service paradigm was accompanied by a change in the customer's role and characteristics. In particular, customers are no longer seen as the passive recipient of companies' products and/or services. Instead, they become more active, informed and empowered customers who are able to participate in creating their unique experiences (Prahalad & Ramaswamy, 2004). Thus, organisations must change their traditional strategies when interacting with customers, to new and improved ones that target customers as more empowered purchasers. Sandström et al. (2008) emphasised that it is critical for organisations to build an attractive and robust environment to enable customers to co-create unique experiences.

Based on the service logic view, Grönroos (2008) re-casts customers' and organisations' roles in the value co-creation process. Through a conceptual framework, two aspects of service logic have been displayed: the first one relates to the customers' consuming journey (customer service logic) and the second to service provision (provider service logic). Based on the customer service logic, the customer is the sole creator of value, which is generated in the customer's sphere and emerges in practice during customers' everyday life and the value generating processes (Grönroos, 2008). However, from a service provider perspective, firms play an important role in developing and providing products

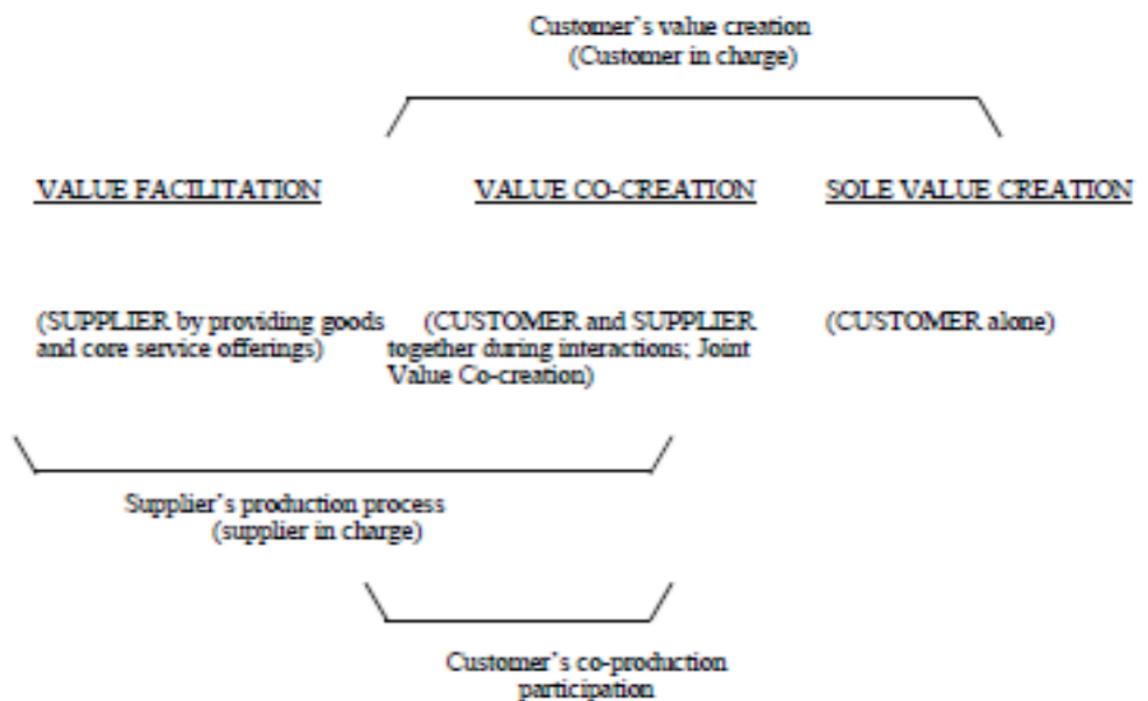
with potential value that can be utilised by customers to create value in their daily processes and practices (Grönroos, 2008). The service provider's role as "value facilitator" is critical as it is based on helping and simplifying value through the provision of resources (goods, services, information or other resources), and it is considered a foundation for the customers' value creation process.

Sandström et al. (2008) identify the nature of the value proposition that companies should improve on and deliver to facilitate value creation for themselves and their customers' value perceptions. These value propositions, which they call physical enablers, represent any physical/technical attributes or products that can be delivered by firms as prerequisites to service experience creation. In particular, these enablers represent signs, symbols and the required infrastructure for service consumption. For online services, these enablers represent the infrastructure required to conduct the service through integrating physical products and services (Sandström et al., 2008). The authors concluded that companies should strive to improve their strategies and tools to create unique customer value propositions, through eliciting favourable service experience opportunities.

The organisation's role is essentially to produce resources which the customer integrates in their process of value creation to create value-in-use (Grönroos & Ravald, 2011). In particular, the production process may include improving products or designing new products which serve as fundamental inputs into the customer's value creation process. The second role that an organisation plays is as a value *co-creator*, based on mutual interaction with customers to influence their perceptions of quality and their creation of value-in-use (Grönroos, 2009, 2011). Organisations or service providers have to take the initiative to create different means of interaction with their customers (e.g. call centres, websites). It is during this interaction that both organisations and customers co-influence the value generated from the customers' process. Patrício et al. (2008) are in favour of shifting the service provider's role from mere service provider, to improving service settings and managing service clues that are capable of co-creating unique

experiences for their customers. Thus, despite customers being the sole creators of value, the interaction enables the organisations to co-create value with their customers. Figure 2.1 provides an overview of the service process as conceived by Grönroos (2009).

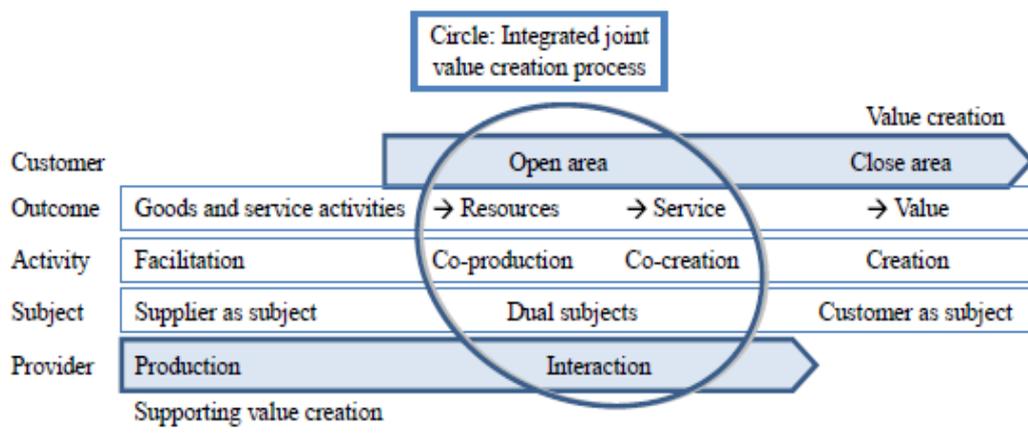
**Figure 2.1: Value creation from a value-in-use perspective: value creation, value facilitation, and value co-creation as well as production and co-production (Grönroos, 2009)**



In a subsequent study, Grönroos and Ravald (2011) extended their representation of organisations' and customers' roles during the value creation process. The authors emphasised that during this process customers are immersed in either an open or closed area. Within the closed area customers are independently creating value through their integration of resources provided by the organisations which are indirectly enhancing value creation; within the open area customers have direct interaction with the organisations, and this exchange is a joint process. Through the latter process, customers become involved in the organisation's or

supplier's process, while organisations get a chance to operate in the customer's value creation process in which co-creation opportunities might occur (Grönroos & Ravald, 2011). A schematic display of this elaboration of value creation and co-creation in the organisation-customer relationship is shown in Figure 2.2.

**Figure 2.2: Value creation and co-creation in supplier-customer relationships (Grönroos & Ravald, 2011)**



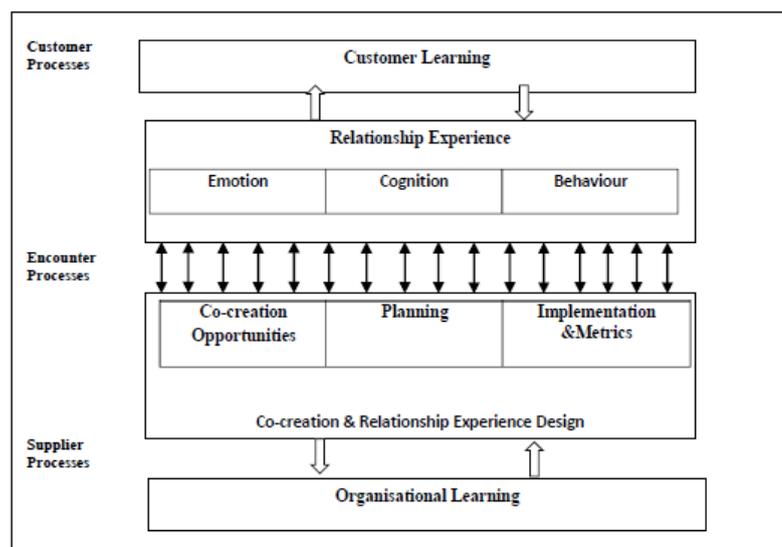
A major point of interest in the present study is the central area of overlap where firms and customers jointly co-create value through interaction. This point regarding co-creation is consistent with the views of Prahalad and Ramaswamy (2004) and Sheth and Uslay (2007). Moreover, this study also investigates customer creation of value-in-use (discussed later in this chapter) which takes place in the customer's closed area.

In a similar vein to Grönroos (2009), Payne et al. (2008) demonstrate how customers engage in value creation from a process perspective, with emphasis on the importance of interaction. Their study builds a theoretical framework which was based on a series of processes leading to value co-creation. The process-based framework is composed of three main components: customer value-creating processes, supplier value-creating processes and encounter processes. Figure 2.3 summarises their proposed processes. The framework demonstrates the evolving nature of co-creation through an interconnected set of processes. The

arrows indicating the encounter processes represent the interactive nature of encounters between suppliers and customers. The relationship between customer learning and customer processes demonstrates that the customer is involved in learning processes generated from their relationship experiences (Payne, et al., 2008).

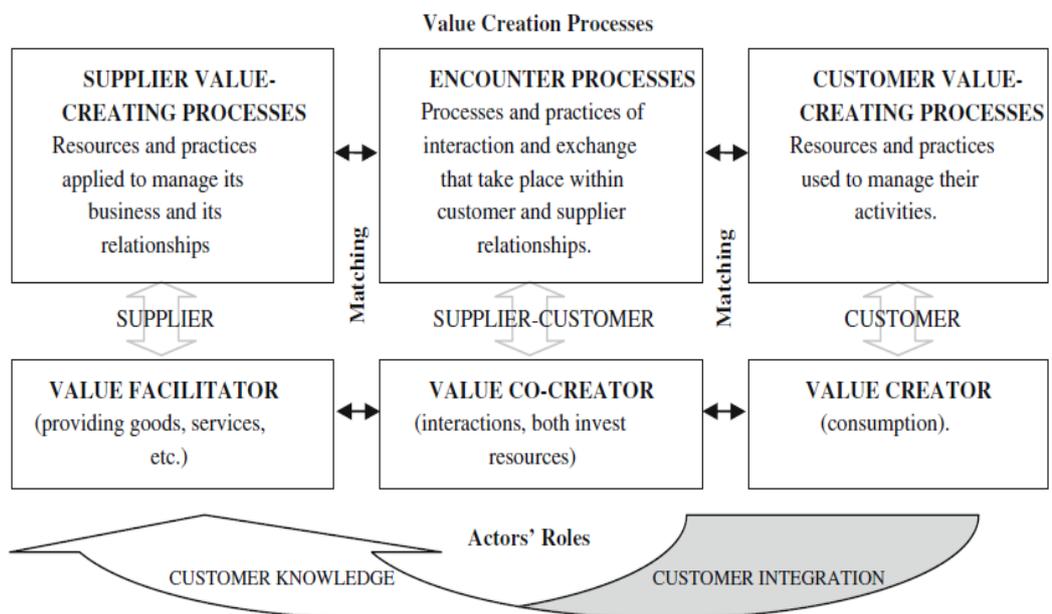
Payne et al. (2008) highlight that this learning influences the customer's future co-creation activities. In a similar way, the more the supplier knows about the customer, the more opportunities can be created to support the relationship experience and improve co-creation with customers; this is emphasised in the organisational learning processes. Payne et al.'s study (2008) builds on and contributes to the value co-creation paradigm by investigating how customers are involved in the process of value co-creation. Their framework demonstrates that co-creation opportunities emerge within the supplier process, which is consistent with Grönroos's (2008) supplier's role of creating opportunities, which in turn enables suppliers to involve their customers in the value generating process.

**Figure 2.3: A conceptual framework for value co-creation (Payne et al., 2008)**



In an attempt to empirically investigate the validity of value co-creation processes, and to recast the customer's and firm's roles in fostering value co-creation, Andreu et al. (2010) proposed a value co-creation framework which incorporates both the process view of Payne et al. (2008) and the actors' view of Grönroos (2008). Andreu et al. (2010) developed an integrated framework, which they empirically tested in the furniture industry. Figure 2.4 provides their integrated model:

**Figure 2.4: A conceptual framework of value co-creation (Andreu et al., 2010)**



In summary, value fulfilment and value creation are achieved through the organisation's successful efforts in value facilitation and co-creation with customers, enabling them to maximise value (Grönroos, 2009). Despite the critical role that organisations play in facilitating value and value co-creation opportunities for their customers, the extant literature on how to manage co-created services is still limited (Payne et al., 2008). The reason underlying this gap is the limited knowledge pertaining to the link between customers and organisations (Ostrom et al., 2010). Further, a thorough literature review has revealed that according to S-D logic and service logic, to focus on value creation

a thorough investigation from the customer's point of view is required (Ostrom et al., 2010). The previous discussion accentuates the importance of exploring interaction experiences between customers and service providers (i.e. banks in the current study) to understand how co-creation is employed by each party.

Examining interaction banking experiences from the customer perspective is a driver in understanding how co-creation opportunities are created. Thus, the main purpose of the first part of the present study is to explore how managers and customers act to co-create value, and to identify different opportunities for customers to co-create in a multichannel banking context. Once the meaning of customer value co-creation and different opportunities of co-creation have been identified, the second part of the study investigates antecedent factors influencing customers in their experience of co-creation and its subsequent effect on customers' outcomes (i.e. commitment) and value-in-use. Hence, the following questions emerge:

Q1: How do banks and their customers work together (i.e. co-create) to produce value in a multichannel banking context?

Q2: What antecedent factors influence the co-creation experience in a multichannel banking context?

Understanding the meaning behind interactions that lead to the co-creation experience are a precursor to identifying the factors influencing this experience and its outcomes; i.e. how customers assess the overall value of a service, and more particularly, value-in-use. These areas are discussed next.

## ***2.4 Quality in multichannel banking***

Within the extant literature, service experience is measured by evaluating the quality of predetermined service attributes (Walter, Edvardsson, & Ostrom, 2010). Particularly, the service experience is measured by comparing what customers

expect with what they actually receive. In other words, customers evaluate the service via a set of predetermined attributes through which the customer is a mere passive observer (Walter et al., 2010). An example of one the most popular techniques in literature to measure service quality is the SERVQUAL model by Parasuraman, Zeithaml and Berry (1985). The basic concept underlying this model is to perform a gap analysis to compare the organisation's service quality performance with customer quality needs. Relying on the data obtained from 12 focus groups, the authors came to realise that customers evaluate service quality based on ten dimensions, which was later reduced to five dimensions (tangibles, reliability, responsiveness, assurance and empathy), as compared to what they expected. In particular, traditional service quality was based on a single-channel mindset, taking into consideration the physical facilities related to the service provided (Sousa & Voss, 2006).

Another comprehensive and useful model of service quality is introduced by Grönroos (1984), which describes how customers perceive the quality of service. In doing so, the model is composed of two dimensions: technical quality and functional quality. Technical quality pertains to the instrumental performance of a service. In fact, technical quality is what consumers get as an outcome of his/her interaction with the service firm and this outcome is essential to his/her assessment of the quality of this service. However, functional value is concerned with the functionality of the process of providing service. Consumers are concerned with both the output of the process, and also the process itself. In other words, functional quality means the performance of service, which includes interaction with the consumer. Moreover, technical quality is objective in nature, however; functional quality is subjective.

Later on, Lehtinen and Lehtinen (1999), introduced two approaches to service quality: two dimensional and three dimensional. Like Grönroos (1984), The two dimensional approach is composed of the process and its outcome. This approach is grounded on interaction between the customer and elements of the service, and hence service quality is generated. The three dimensional approach is composed

of different dimensions of the service production process: physical quality, interactive quality and corporate quality. Physical quality pertains to the quality perceived from the physical product and physical support. Interactive quality is the quality that originates from interaction between the customer and interactive elements of the service organisation. More specifically, interactive elements in the service context are composed of the interactive persons and interaction equipment which are in contact with the customer during service production.

Moving to contemporary technologies, the internet the main component of functional quality. Further, because the website represents the main virtual channel of service delivery, Sousa and Voss (2006) assumed that virtual quality corresponds to website quality. The dimensions and measurements of the quality of e-services involve elements pertaining to the site experience and the relationship between these elements and customer outcome behaviours such as customer satisfaction, intention to buy and loyalty (Rowley, 2006). Parasuraman, Zeithaml, and Malhotra (2005) have viewed electronic service quality as being “the extent to which the website facilitates efficient and effective shopping, purchasing and delivery” (p. 217). Although some dimensions of traditional service quality are shared with the new emerging virtual quality, new channel-related dimensions have been created.

Sousa and Voss (2006) argued that a multichannel environment needs a deeper understanding of service quality, taking into consideration all types of contact with the company via multiple channels. Accordingly, multichannel service quality denotes the quality of the all-encompassing service experience by combining physical and virtual components. Reviewing the previous literature unveils several questions which need further investigation. For example, one of the questions that arises is how information consistency across channels might affect customers’ outcome behaviours (Rangasawamy & Van Bruggen, 2005). Reviewing further literature about virtual, physical and integration quality is a must to discover factors related to customer banking experiences of multiple channels. Moreover, Sousa and Voss (2006) argued that service quality in a

multichannel setting is composed of three components: virtual, physical and integration quality; these are discussed in detail below.

### **Virtual quality**

In the present study, virtual quality represents website quality which has attracted much of the recent schools of research. Several attempts have been made to measure website quality. The following section reviews the most important instruments used to evaluate service quality of websites in general and banking websites in particular.

Loiacono, Watson, and Goodhue (2000, as cited in Zeithaml, Parasuraman, & Malhotra, 2002) created a scale called WEBQUAL, which was composed of 12 dimensions: *informational fit to task, interaction, trust, response time, design, intuitiveness, visual appeal, innovativeness, flow (emotional appeal), integrated communication, business processes and substitutability*. *Informational fit to task* demonstrates the extent to which the content of the website is appropriate and well presented. *Interaction* represents the degree to which the website can facilitate effective interactions with personnel and how effective the website is in terms of searching for information and conducting transactions. The mission of the *trust* dimension is associated with users' privacy concerns.

Moreover, *response time* reflects the speed of information loading and the time needed to conduct the transactions. *Design appeal* is related to the website's information display and ease of navigability, while *intuitiveness* demonstrates the degree to which users understand the various aspects of the website. The extent to which the graphics and text on the website is well displayed is related to the *visual appeal* dimension. *Innovativeness* is the degree to which the website shows elements of ingenuity and uniqueness. The *flow* (emotional appeal) dimension is related to users' enjoyment while using the website. *Integrated communication* refers to the extent to which the website provides seamless service across multiple channels (Zeithaml et al., 2002; Sousa & Voss, 2006). *The business process* dimension measures how the web strategy fits with general

business strategy. Finally, *substitutability* reflects the effectiveness of website interaction compared with physical encounters (Zeithaml et al., 2002).

The overall purpose of WEBQUAL was to support website designers in improving website designs. Thus, it is suitable for website designers rather than as a measurement for e-service quality (Zeithaml et al., 2002). This is because the dimension representing the aspect of customer service was eliminated from the scale due to methodological considerations. Moreover, the survey used was targeting students rather than actual buyers. One of the scale's deficiencies in measuring service quality, is the lack of measurement regarding the fulfilment dimension, as it was targeting unrealistic buyers (Zeithaml et al., 2002).

Barnes and Vidgen (2002) contributed to the extant literature by constructing another scale called also WEBQUAL. The scale was designed to measure the way in which organisations could offer their services. The scale resulted with an index of a site's quality representing five dimensions: usability, design, information, trust and empathy. A convenience sample of university students and staff were asked to participate in the study by rating their experience of the scale items through visiting a bookstore site. Aside from the scale's benefits, it does not provide a comprehensive evaluation of service quality (Parasuraman et al., 2005), as participants' assessments were transaction-specific, because the full purchasing process was not conducted.

A thorough review and synthesis of the existing literature, conducted by Zeithaml et al. (2002), reveals five dimensions pertinent to e-service quality perceptions:

1. Information availability and content
2. Ease of use or usability
3. Privacy/security
4. Graphic style

## 5. Reliability /fulfilment

Synthesis of literature reveals the multifaceted nature of e-service quality, thus there is no consensus on the component dimensions, but there were frequently emerging dimensions such as ease of use, site design, efficiency, privacy/security and fulfilment (Zeithaml et al., 2002). A distinctive endeavour to examine customers' perceptions of the quality of e-tailing services, has resulted in a scale called eTailQ comprised of 14 items (Wolfenbarger & Gilly, 2003). The scale was anchored in four dimensions:

1. Website design: reflects customers' experience with the website in terms of navigation, information searches and some attributes associated with design and personalisation.
2. Fulfilment/reliability: reflects the accuracy of representing the products, which includes accurate orders and punctual delivery.
3. Privacy/security: reflects the extent to which the site is secure in terms of customers' payment information.
4. Customer service: represents employees' willingness and interest in solving problems, and prompt answers to queries.

Their attempt to construct the scale is considered useful and comprehensive as the data was collected using three approaches (i.e. online and offline focus groups, a sorting task and an online-customer-panel survey). Due to the present study's main purpose being focused on customer value co-creation in the multichannel context, evaluating customer service interaction is essential. In addition, the present study is supported by Wolfenbarger and Gilly's (2003) measure when determining items for co-creation.

A subsequent study by Parasuraman et al. (2005), where they called for a need to identify the scope and elements of e-service quality, conceptualises, constructs, refines and tests a multiple item scale (E-S-QUAL) to measure service quality delivered through websites. The resulting E-S-QUAL scale consists of 22 items

with four dimensions:

1. Efficiency: represents the ease of use and the speed of accessing the site.
2. Fulfilment: the extent to which items are available and orders are delivered as promised.
3. System availability: represents the technical functioning of the site.
4. Privacy: the extent to which the site is protected and ensures the privacy of customer shared information.

The authors distinguished between core and recovery services resulting in E-RecS-QUAL, which consisted of 11 items on three dimensions; it takes into consideration the means-end framework as the theoretical basis (Parasuraman, et al., 2005):

1. Responsiveness: the degree to which the site can handle problems and returns.
2. Compensation: represents effective compensation for customers' problems.
3. Contact: the degree to which the site can provide assistance through telephone or online representatives.

The authors indicate that their research was limited to websites that provide physical goods rather than service sites which are dedicated to service provision (e.g. financial or information services). Two major deficiencies emerged from these previous studies. The first is associated with measuring the quality of the website as an interface. The second is related to the subjective nature of some of the identified factors in some of the studies (Ibrahim, Joseph, & Ibeh, 2006).

### **Virtual quality in banks**

Over the past few decades, technology has been utilised by services organisations, such as retail banking, to widen their distribution channels, enhance customer service quality, minimise costs and standardise core service offerings (Bauer, Hammerschmidt, & Falk, 2005; Sohail & Shaikh, 2008). The increase in

electronic delivery modes urges banking institutions to obtain customer perceptions of the services they provide via a variety of electronic interfaces (Bauer et al., 2005; Zeithaml et al., 2002). Jayawardhena (2004) developed a scale to evaluate customer service quality in e-banking services and examined e-service quality dimensions such as website interface, trust, attention, access and credibility. The findings from focus groups' analysis reveal that customers consider downloading speed, navigability and search feature efficiency as important features for e-banking services. However, the model does not consider customers' emotional reactions to services (Bauer et al., 2005).

Another stream of research has investigated new approaches to evaluating the quality of service delivered via multiple types of contact such as internet banking, ATMs and telephone banking (Al-Hawari & Ward, 2006; Ibrahim et al., 2006). Al-Hawari and Ward's (2006) study found that customer perception of service quality influences their satisfaction and therefore the bank's profitability. Ibrahim et al. (2006) examined the quality of banking services delivered via multiple contact points such as ATMs, phone and website. The study reveals six dimensions of e-service quality:

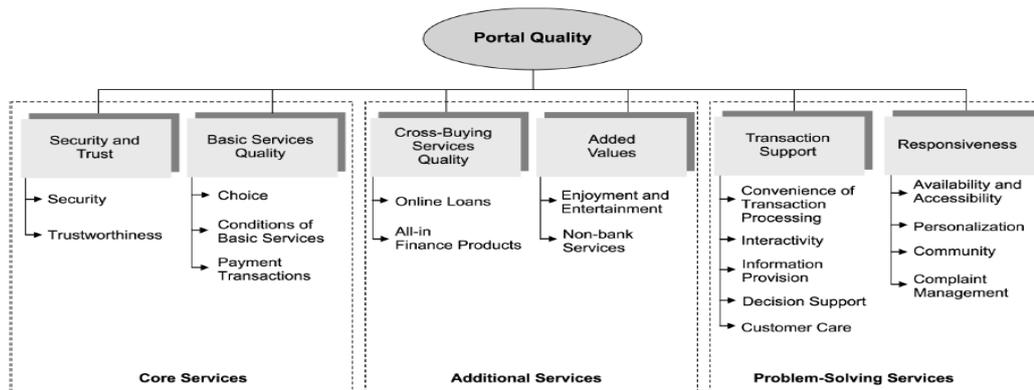
1. Convenient/accurate operations
2. Accessibility and reliability
3. Good queue management
4. Service personalisation
5. Friendly and responsiveness customer service provision
6. Targeted customer service provision

The concept of e-banking portals was brought to the fore by Bauer et al. (2005). The authors contribute to e-services in the banking context through introducing the concept of e-banking portals. E-banking portals demonstrate an integration of business models; the four Cs of business models (content, context, communication and commerce) are combined to form one comprehensive business model (Bauer et al., 2005). An e-portal demonstrates an extensive website which enables customers to conduct the financial transaction cycle in one

place (i.e. information provision, initiation, negotiation, execution/settlement, and after-sale support). This means that customers are able to conduct most of their banking transactions via one site only, such as paying bills, reviewing statements and purchasing stocks (Bauer et al., 2005). Another distinguishing feature which can transform a regular website into an e-portal is its capability to involve services from third parties. Moreover, what makes the e-portal more interactive is its ability to personalise services for the customers' own needs and desires (Bauer et al., 2005). Thus, portal sites are able to provide customers with supporting services which can add value to the products and accordingly help customers to co-create their experiences.

To assess the quality of the e-banking portal, Bauer et al. (2005) classified the quality dimensions under three generic service categories: core services, additional (supplementary) services and solution services. Adopting an explorative approach, the authors generated an initial item pool through interviews and in-depth discussions, which were then measured empirically via an online survey. A performance-only scale was utilised to measure the items. The findings of the study resulted in six fundamental quality dimensions: *security and trust*, *basic service quality*, *cross-buying services quality*, *added values*, *transaction support* and *responsiveness*. The six main quality dimensions are classified under core services, additional services and problem-solving services respectively. *Security and trust* and *basic service quality* represent the core services provided by the banks; these are in highest demand. However, *cross-buying services quality* and *added values* play a critical role as they demonstrate the supporting services to the core services. Finally, *transaction support* and *responsiveness* demonstrate the extent to which the portal is responsive to customers' requests and needs. The portal also involves a variety of ways for instant interaction with the banks (Bauer et al., 2005). Portal quality dimensions are displayed in Figure 2.5:

**Figure 2.5: The validated measurement model of portal quality (Bauer et al., 2005)**



Although Bauer et al.'s (2005) framework is considered useful and comprehensive, by the authors' own admission, it lacks consideration of the synchronisation of online and offline business components; this demonstrates the basic assumption underlying the multichannel context. Thus, the present study takes into consideration integration quality in order to evaluate a seamless service experience across channels and to compensate for this deficiency.

### 2.4.1 Integration quality

Integration quality is defined as "the ability to provide customers with a seamless service experience across multiple channels" (Sousa & Voss, 2006, p. 365). Sousa and Voss (2006) build on the dimensions of Loiacono, Watson and Goodhue's WEBQUAL (2001, as cited in Sousa & Voss, 2006) and contribute to literature by proposing dimensions for measuring integration quality of multichannel services. To measure *integration quality*, Sousa and Voss (2006) proposed two quality dimensions: *channel service configuration* and *integrated interaction*. *Channel service configuration* represents "the quality of the available combination of services or service components and the associated service delivery channels" (Sousa & Voss, 2006, p. 366). Sousa and Voss (2006) represent two potential indicators of the first dimension: (1) the extent to which a variety of channels are available for customers to select from (parallel-channels mode) and the extent to which customers are able to conduct a transaction

through each existing channel (complementary-channels mode); (2) the extent of customers' knowledge of all accessible channels.

*Integrated interactions* reflect “the consistency of interactions across channels, resulting in a uniform service experience” (Sousa & Voss, 2006, p. 366). According to the authors, integrated interactions are composed of two dimensions, namely *content consistency* and *process consistency*. In particular, *content consistency* is the extent to which the exchanged information (outgoing and incoming) via multiple channels is consistent (Sousa & Voss, 2006). Potential indicators of this dimension, which represent the *ongoing information*, include a consistent response to a certain query requested through different channels. However, *incoming information consistency* represents the degree of consideration given to service interaction in one channel bearing in mind previous interactions through different channels. *Process consistency* is the extent to which the relevant and comparable process attributes are consistent (Sousa & Voss, 2006). A potential indicator for this dimension includes the consistency across channels in terms of the service's feel, image, waiting time and level of employee discretion (Sousa & Voss, 2006).

### **Physical quality**

Physical service quality dimensions that the present study concentrates on are the ones which appear to complement virtual service components. Physical service components are represented either via non-human contact (logistic fulfilment) or via interpersonal contact (face-to-face, phone, etc.) (Sousa & Voss, 2006). According to Sousa and Voss (2006), physical services complement virtual services, through which the customer might refer to the interpersonal services in two ways: (1) routine service delivered through a brick-and-mortar delivery channel, or (2) recovery services which mainly represent customer support. Sousa and Voss (2006) argued that, in the context of a multichannel service, evaluating a routine service delivered through any means of physical delivery is not necessarily different from the traditional conceptualisation of service quality. In particular, Sousa and Voss (2006) also argued that physical customer support

plays an important role in improving the quality of services provided in the multichannel context. In summary, integration, virtual and physical quality have been identified as important factors contributing to the multichannel experience. In this project, integration quality is included as an antecedent factor and the quality of using virtual or physical channels is incorporated into the co-creation experience.

## ***2.5 Outcomes of value co-creation***

The extant literature emphasises the importance of value co-creation in influencing customers' outcomes (Jaworski & Kohli, 2006; Ostrom et al., 2010). The following review of literature demonstrates potential customer actions resulting from their contribution to value co-creation.

### **2.5.1 Overall value (and value-in-use)**

It is considered a real milestone to explore the importance of value creation within the discipline of service logic. The concept of creating value for customers has become of great interest in management and marketing literature since the 1990s (Grönroos, 2008). A review of the extant literature on customer value revealed two dominant schools of thought. The first argued that value is a trade-off between what benefits customers can get (i.e. social, economic, relational) and what sacrifices can be made (i.e. price, time, effort, risk) (Cronin, Brady, Brand, Hightower, & Shemwell, 1997; Roig, Garcia, & Tena, 2009; Zeithaml, 1988). Accordingly, value is defined as “the consumer’s overall assessment of the utility of a product based on perceptions on what is received and what is given” (Zeithaml, 1988, p. 14). The second school emphasised the multi-dimensionality of the construct by emphasising two dimensions. The first is functional and the second is emotional. While the affective or emotional dimension represents the feelings or emotions aroused through using products or services, the functional dimension focuses on the quality of services or products (Heinonen, 2009; Roig et al., 2009).

An important contribution which emphasised the functional and emotional dimensions was carried out by Sheth, Newman and Gross (1991), who developed a consumption-value theory to explain why consumers make the choices they do. The theory identified five types of value, which presumably influence consumer choice behaviour. These are functional value, social value, emotional value, epistemic value, and conditional value. Firstly, functional value represents utilitarian or physical attributes associated with the alternative. Secondly, social value is the utility of the alternative's association to one or more specific social groups. Thirdly, emotional value is determined when the consumer experiences utility due to the alternative's ability to arouse feelings or affective states. Fourthly, epistemic value is experienced when the alternative is capable to provoke their desire to learn or try a new thing. The final type is conditional value, which originates in a specific situation or set of circumstances facing the choice maker. Conditional value is associated with the presence of antecedent physical and social contingencies, which enhance functional and social value.

The previous dimensions were associated with the perceived utility of a choice as related to the purchase decision (buy or not buy), the product type (product type A or product type B) or to the brand type (brand A or brand B). Sheth et al.'s (1991) taxonomy is of great importance as a cornerstone to the development of theory of value because it was validated in different contexts including location-based and tourism services. The taxonomy has also been discussed widely and intensively examined in a variety of fields such as economics, social and clinical psychology (Sweeney & Soutar, 2001). Finally, consumption-value theory as introduced by Sheth et al. (1991) is one of the most important contributions to conceptualise and evaluate perceived value as a complex multi-dimensional construct (Sánchez-Fernández & Iniesta-Bonillo, 2007); however, it does not consider other attributes of value such as ethics and spirituality (Holbrook, 1994, 1999).

There have been a number of empirical studies, which extended Sheth et al.'s (1991) taxonomy. In the tourism industry, Williams and Soutar (2000) have identified four of the value dimensions (functional, social, emotional and epistemic) (Sheth et al., 1991), but conditional value was an exception.

Sweeney and Soutar (2001) have developed a perceived consumer value scale, PERVAL, which measures customers' perceptions of the value derived during purchase situation of a consumer durable goods at a brand level. The measure was designed to identify the values that lead to purchase attitude and behaviour. As grounded on Sheth et al.'s (1991) taxonomy, four types of value were identified: functional value, which was broken down into (price/value for money) and (quality/performance), emotional and social value. Functional value (price/value for money) is the utility derived from the product due to the reduction of its perceived short term and longer term costs; functional value (quality/performance) is the derived utility from the quality and performance of the consumed product; emotional value represents the feelings and affective states which the product creates. Social value is the type of value experienced when the product is able to enhance the consumer self-concept. Although the measure was based on Sheth et al.'s (1991) taxonomy, the scale has excluded epistemic and conditional value. The study found that emotional value (the enjoyment derived from the product) and social value (the effects that the product generates to others) are as important as functional value.

Later on, Pura (2005) examined the influence of perceived value dimensions on attitudinal and behavioural components of loyalty in mobile context. Based on Sheth et al.'s (1991) value dimensions, Pura (2005) extended this taxonomy and viewed functional value to include monetary and convenience dimensions. Social value (social approval and enhancement of self-image) and emotional value (feelings and enjoyment associated with the product use) were also examined as described by Sheth et al. (1991) and Sweeney and Soutar (2001). Conditional value is the value that depends on the context, and epistemic is the value associated with experience novelty, curiosity and gained knowledge. Findings of the study demonstrate the importance of conditional value to impact both behavioural intentions and commitment. Commitment also is found to be influenced by emotional value. The study contributes to literature by developing a multidimensional value and loyalty model, which was examined in a location based service context.

More recently, Gounaris, Tzempelikos and Chatzipanagiotou (2007) examined the concept of customer perceived value (CPV) as a formative construct and its impact on the behavioral intentions of word of mouth, repurchase intention and cross-buying via satisfaction and loyalty. Following the early attempts of identifying perceived value dimensions (Sheth et al., 1991; Sweeney & Soutar, 2001), Gounaris et al. (2007) accentuate the need to incorporate the utility derived from the intangible aspects of the product. The study contributes to the notion of CPV by introducing ‘personnel value’ (i.e. the value associated with service personnel skills and capabilities) and ‘procedural value’ (the utility derived from the company’s service delivery procedures and operations). Hence, the study confirmed five value dimensions (product value, procedural value, personnel value, emotional value and perceived sacrifice) as the major constituents of CPV. Findings indicate that customer satisfaction is highly influenced by all CPV dimensions excluding personnel value. Added to that, procedural value demonstrates the most influential factor, which impacts buyers’ satisfaction level. Although the findings demonstrate the multidimensional nature of the construct, they do not consider the intrinsic aspects of value (e.g. spirituality, aesthetic and fun). Gounaris et al. (2007) study also sheds light on the dynamic nature of customers’ needs; hence, their perception of perceived value might also change over time.

Moreover, a recent endeavour to measure perceived value in financial services is the study by Roig et al. (2009), which investigates the relationship between perceived value, satisfaction and loyalty by conceptualising perceived value as being captured through three dimensions: functional, emotional and social. The previous contributions to the notion of perceived value lay the foundation for the improvement of a scale to measure the construct (Williams & Soutar, 2000; Sweeney & Soutar, 2001; Pura, 2005; Gounaris et al., 2007).

Another important contribution to the theory of value is the work of Holbrook and colleagues who emphasised the importance to revisit the concept of value as perceived by consumers (Holbrook & Hirschman, 1982; Holbrook, 1994; Holbrook, 1999). According to this stream of literature, consumer value is

defined as “an interactive relativistic preference experience” (Holbrook, 1994, p. 27). Commenting on this definition, Holbrook (1999) emphasised that the relationship between consumer and objects (i.e. products) relies on relevant comparison and depends on subjective judgement, which varies according to individuals and situations. In an attempt to reconceptualise the nature of value and its different types experienced during consumption, Holbrook (1999) introduces the typology of consumer value. The typology classified customer value according to three key underlying dimensions (Holbrook, 1999):

1. Extrinsic/Intrinsic

Extrinsic value represents the extent to which some objects or experiences serve as the means to an end (i.e. performing a function which is instrumental in nature), whereas intrinsic value reflects the extent to which an experience is valued as an end in itself (i.e. for its own sake).

2. Self-oriented/Other oriented

Self-oriented value refers to the case in which an object or experience is valued for one’s own sake. In other words, it represents the value, which affects the consumer during consumption experience or how the consumer responds to it. On the other hand, other-oriented value is related to how the product or the consumption experience is valued according to others (i.e. for their sake, for how to influence them or for how they respond to it).

3. Active/Reactive

Active value represents consumer direct interaction with an object (i.e. tangible or intangible), which involves mental or physical manipulation (e.g. driving a car). In contrast, reactive value represents the value as appreciated or admired wherein the object influences consumer during consumption experience. The following table (2.1) displays the eight-celled typology of consumer value:

**Table 2.1: Typology of consumer value (Holbrook, 1999)**

		Extrinsic	Intrinsic
<b>Self-oriented</b>	Active	Efficiency  (output/input, convenience)	Play (fun)
	Reactive	Excellence (quality)	Aesthetics (beauty)
<b>Other-oriented</b>	Active	Status (success, impression, management)	Ethics (virtue, justice, morality)
	Reactive	Esteem (reputation, materialism, possessions)	Spirituality (faith, ecstasy, rapture, sacredness, magic)

Through the previous classification, Holbrook (1999) identified categories of value that consumers might result during consumption experience. Eight types of value were identified: efficiency, excellence, play, aesthetics, status, esteem, ethics and spirituality as indicated in Table (2.1). Although Holbrook’s classification of different types of value appears to be comprehensive as incorporating hedonic and utilitarian aspects of value, it accentuates that the dimensions tend to appear combined to a certain degree (Sánchez-Fernández & Iniesta-Bonillo, 2007). As grounded partially on the axiology of value, Holbrook’s classification of value dimensions is one of the important contributions to the understanding of the nature of value (Sánchez-Fernández & Iniesta-Bonillo, 2007). Holbrook’s contribution demonstrates that perceived value “implies an interaction between a subject (the consumer) and an object (the product); it is comparative, personal, and situational (specific to the context); and it embodies a preference judgement” (Sánchez-Fernández & Iniesta-Bonillo, 2007, p.439). Holbrook’s typology is particularly important to this thesis as the study is being conducted in a multi-channel context in a developing country, which means that the comparative, personal, and situational factors may be different to those of consumers in other contexts. However, scholars note that its

complex structure impedes operationalising some types of value, for example spiritual value (Sánchez-Fernández & Iniesta-Bonillo, 2007). Hence, care is taken to ensure that all relevant aspects of value are identified and tested.

Recent literature emphasised that value conceptualisation is difficult to define and measure (Grönroos, 2008), as it is an elusive term (Vargo et al., 2008). Its elusiveness arises from the limited view that value is embedded in the exchange paradigm (Vargo et al., 2008). The concept of value is not new to the exchange paradigm, but this paradigm primarily focuses on one type of value, value-in-exchange. The true essence of this type of value is that it is created via an exchange between buyer and seller (Sheth & Uslay, 2007). However, Grönroos and Ravald (2011) argued that the notion of value-in-exchange, where value for customers is potentially in exchanged products and outputs, is challenged by the prevailing concept of value-in-use. As previously mentioned, the value-in-exchange concept is based on the value embedded in the manufactured goods, while the value generated from the customer's own experience within the value-generating process is known as the value-in-use (Grönroos, 2006; Normann, 2001; Vargo & Lusch, 2004). The view of the customer's role in value creation follows from the notion of value-in-use, which maintains that value is created when customers use goods and services rather than being embedded in goods (Grönroos, 2008). Throughout the current thesis the term value and value-in-use are used interchangeably.

In S-D logic, the concept of value-in-use warrants substantial consideration. This means not only considering the customer as the focal point, but also organisations' need to cooperate with them to exchange knowledge, while bearing in mind their changing and progressive personal desires (Vargo & Lusch, 2004). In essence, a service-centred dominant logic implies that value is defined by and is co-created with the consumer rather than being embedded in output (Vargo & Lusch, 2004). Thus, value is considered to be the comparative appreciation of reciprocal skills or services that are exchanged to obtain utility; value meaning "value-in-use". In particular, value-in-use is defined as a

“phenomenological experience perceived by a customer through their interaction with products/services bundles in usage situations” (Woodruff & Flint, 2006, p. 185). In an attempt to understand the service experience and its impact on customer value, Sandström et al. (2008) indicate that value-in-use is the customer’s personal assessment of their overall functional and emotional experiences, and their resulting actions. Sandström et al. (2008) also emphasised that value cannot be prepared and encapsulated by the service provider, but rather judged by the user during consumption. Given the fact that the major aim of the present study is to explore co-creation experiences derived from multichannel banking interactions, the study also investigates the influence of customer co-creation experience elements on their perception of value when using multiple banking channels.

Recent literature on service logic emphasised the importance of value-in-use as a concept to enable further analysis and rigorous understanding of value co-creation (Grönroos & Ravald, 2011; Grönroos & Voima, 2012). Grönroos and Voima (2012) argued that treating value creation as customers’ creation of value-in-use, a state where a customer feels better (Grönroos, 2008) or worse off (Grönroos & Voima, 2012) and value is temporally accumulated through experiences (Grönroos, 2011), enables further analytical improvement and logical flow of knowledge. The core meaning of value-in-use emphasises the critical role of the user as the main generator of value during the usage journey. Grönroos and Voima (2012) argued that value creation is simply customers’ creation of value-in-use. Accordingly, value is created during the users’ physical or mental integration of resources and sometimes from the mere possession of them (Grönroos & Voima, 2012); the process of usage is considered the main defining concept. The authors also emphasise the importance of context of use of the service (i.e. social, physical, temporal and/or spatial) in determining value-in-use.

As mentioned in Chapter 1, value-in-use is customers’ cognitive evaluation of the value generated during their use of resources and processes and their outcomes;

usage can be physical, virtual, mental or a mere possession (adapted from Sandström et al., 2008; Grönroos & Voima, 2012). To the researcher's knowledge, none of the previous contributions have empirically measured value-in-use in the banking context. This means that the customer's perceived value of using multichannel banking needs to be identified and measured. Accordingly, the present study explores this. Hence, the third question warranting an answer is:

Q3: What constitutes overall value (value-in-use) for customers in relation to multichannel banking?

Grönroos and Voima (2012) argued that treating value creation as a process of co-creation, in which different parties collaborate to generate value and are always considered co-creators of value, implies that value creation is an all-encompassing process (Grönroos & Voima, 2012). As indicated previously (Chapter 1), defining the concept as an all-encompassing process hinders the S-D logic from clearly identifying what each party's roles and actions are in the process and what constitutes the overall process of value creation or co-creation (Grönroos & Ravald, 2011). It also invalidates the need to construct any further theoretical elaboration or draw practical managerial implications (Grönroos, 2011). Hence, the current study distinguishes between the co-creation experience and the concept of ultimate value in the consumer's mind. Reviewing the S-D logic and value co-creation literature has revealed many unanswered questions. For instance, what are the processes involved in value co-creation, how should the concept be measured, and what is the role of technology? (Vargo et al., 2008). These questions require the application of the multichannel context, and an understanding of the idea of quality in multichannel banking.

The S-D logic assumes that "there is no value until an offering is used; experience and perception are essential to value determination" (Vargo & Lusch, 2006, p. 44). Moreover, the current argument regarding value determination emphasised that value accumulates throughout the customers' value creating

process (Grönroos & Voima, 2012). The authors emphasised that no value can be evaluated by the customers unless it is experienced. The current study investigates customers' perception of their value-in-use gained from multichannel banking in relation to co-creation experiences. Hence the study also seeks to answer the following question:

Q4: How do customers' co-creation experiences influence their perceptions of value in use?

### **2.5.2 Loyalty conceptualisation**

Early views of customer loyalty concentrate on behavioural outcomes identified as repeat purchasing intentions or the customer's purchasing behaviour (Jones & Taylor, 2007). Other streams of research argue for the need to involve attitudinal dimensions such as relative attitude (Dick & Basu, 1994). The current study defines loyalty as "the degree to which a customer recommends, and expresses a preference for the future use of, a particular company" (Dean, 2007, p. 163). One of the major contributions to operationalising behavioural intentions was the one introduced by Zeithaml, Berry and Parasuraman (1996) who were able to develop a battery of behavioural intentions. Their study incorporates 13 items grouped into four categories: word-of-mouth communications, purchase intentions, price sensitivity and complaining behaviour (Zeithaml et al., 1996).

Gremler and Brown (1996) contribute to loyalty literature by extending the concept of loyalty to intangible products, and emphasising that customer loyalty measurement must involve three dimensions: purchase, attitude and cognition. Recently, researchers have argued for the need to include a cognitive element; a third dimension to infer the true essence of customer loyalty (Gremler & Brown, 1996; Jones & Taylor, 2007). This cognitive dimension is based upon conscious evaluation of brand attributes or of the rewards and benefits associated with re-patronage (Jones & Taylor, 2007). This is viewed as a higher order dimension which is associated with consumers' conscious decision-making processes in

examining the alternative brands before they purchase (Caruana, 2002).

Recent schools of thought argue for a multi-dimensional conceptualisation of loyalty incorporating theory from interpersonal relationships literature (Jones & Taylor, 2007). These works demonstrate an attempt to settle the debate between marketing scholars as to whether two or three dimensions of loyalty exist in a service setting and whether customer loyalty differs across types of services. The findings of the study indicate that nine different customer responses (loyalty-related outcomes) reveal two dimensions: behavioural and a combined cognitive/attitudinal dimension. The first behavioural aspect demonstrates repurchase, switching and exclusive purchasing intentions (Jones & Taylor, 2007). However, the second aspect demonstrates the attitudinal loyalty, which is represented by consumers' strength of preference, advocacy, altruism, willingness to pay more and identification with the service provider (Jones & Taylor, 2007).

In a subsequent study, Jones, Fox, Taylor, and Fabrigar (2010) reduced the nine dimensions to three, while incorporating the items constituting the previous nine dimensions. The study further contributes to literature in two ways; firstly, by classifying the reduced items into either focal or discretionary behaviours (Jones et al., 2010). The distinction between focal and discretionary behaviours is not new as it was first distinguished within the organisational behaviour discipline when describing employee responses (Meyer, Becker, & Vandenberghe, 2004; Snape & Redman, 2003). According to Jones et al. (2010), repurchase intention and relative attitude are meant to be a focal response, as they demonstrate the core of the exchange relationship between the customer and service organisation, and they represent the key components of customer loyalty (Jones et al., 2010).

While repurchase intention and relative attitude are considered focal, discretionary customer behaviours are considered behaviours customers choose. Examples of these behaviours are advocacy (i.e. word of mouth), fidelity (i.e. exclusive purchase), willingness to pay more and altruism (i.e. helping without direct recompense) (Jones et al., 2010). The second contribution differentiates

between the two types of discretionary outcomes in terms of their focal point. To emphasise their point, the authors based their classification on two dimensions: other-oriented and self-oriented. The other-oriented dimension represents behaviours that assist others (i.e. the firm and its other customers) without expecting reward (Jones, et al., 2010). However, the self-oriented dimension (i.e. customer oriented) is where customer behaviours are concerned with personal outcomes (Jones, et al., 2010). The current study has selected the commitment dimension as the desired customer outcome for the empirical testing. This is because the study is targeting current banking customers. In particular, the study focuses on customers' feelings and intentions to remain loyal (i.e. their commitment).

### **2.5.3 Customer value co-creation and commitment**

Jaworski and Kohli (2006) emphasise that co-creation creates deeper bonds with customers. They suggest that this generates more trust, commitment and greater loyalty. The authors justified their findings based on two main reasons. First, customer involvement in the process of co-creation builds commitment to the final result offered by the firm. Second, the co-creation of value enhances the chance of achieving customer needs and wants. Auh, Bell, McLeod and Shih (2007) accentuate that co-production, as a component of co-creation, has a significant association with attitudinal loyalty. Moreover, Grönroos (2009) states that customers' interaction with service processes (e.g. a call centre, an ATM, vending machine, internet website) or with individuals or technologies, enables the organisations to enhance this interaction by adjusting to their needs and consequently supporting customer value creation. This interaction and its results influence customers' future purchasing behaviour and retention (Grönroos, 2009). Thus, the current study investigates the outcomes of the customer co-creation experience, namely its influence on customer responses (i.e. customer commitment). The current study will test the relationship between the co-creation experience and customer commitment dimensions (affective, normative and continuance).

There is a substantial increase in the importance of relationship marketing to build and maintain successful relational exchange (Morgan & Hunt, 1994). One of the early conceptions of commitment was held by Moorman, Zaltman, and Deshpande (1992), who identified the construct loosely as a desire to maintain a valued relationship. Commitment has also been defined as “an implicit or explicit pledge of relational continuity between exchange partners” (Dwyer, Schurr, & Oh, 1987, p. 19). Most of the definitions generated from different disciplines (i.e. psychology, organisational behaviour and marketing) view commitment as a psychological condition appearing as a mandatory link, vow or dedication. They also represent the construct as a motivational phenomenon such as maintaining a relationship, repurchasing or staying with an organisation (Jones et al., 2010). Thus, the present study views commitment as “a psychological desire-based attachment to the service provider, reflected by the strength of the customer’s identification and involvement with that provider” (developed from Porter, Steers, Mowday, & Boulian, 1974, p. 604).

In 1994, Morgan and Hunt demonstrated a mediating role of commitment between a number of transactional background variables such as quality, shared values, communication and trust, and a number of customer behavioural outcomes (i.e. intentions, customer retention, advocacy and acquiescence). Since then, there appears to be consensus on the role of commitment in creating loyalty (Evanschitzky, Iyer, Plassmann, Niessing, & Meffert, 2006; Jones & Taylor, 2007). Due to the importance of commitment as a precursor to loyalty, it is selected as the desired outcome behaviour to be linked with the co-creation experience. Hence the final question of the current study is:

Q5: How do customers’ co-creation experiences influence their commitment to their banks?

Three dimensions of commitment have been investigated in psychology (e.g. Adams & Jones, 1999), organisational behaviour (e.g. Allen & Meyer, 1990) and

marketing (e.g. Bansal, Irving, & Taylor, 2004; Gruen, Summers, & Acito, 2000). In brief, commitment is experienced through different dimensions: Affective commitment represents individuals' desire to stay in a relationship. However, continuance commitment reflects individuals' perception of what will happen when they terminating a relationship with a service provider. Normative commitment represents individuals' feeling of being obliged to a relationship. In other words, the three dimensions are typically viewed as “want to stay”, “have to stay”, and “should stay” (Gruen et al., 2000). The three dimensions are now discussed in detail.

### **2.5.3.1 Affective commitment**

In recent marketing literature, affective commitment has attracted a plethora of studies and has been identified in a variety of contexts such as channels, sales and services (Jones et al., 2010). The importance of this dimension lies in it being a driver for a cluster of consumer responsive behaviours such as repurchase and switching intentions (Fullerton, 2003). In the present study, affective commitment is defined as the degree to which the customer is in psychological state where he/she feels attached to the service provider on the basis of how favourable it is (Gruen et al., 2000). Moreover, many studies indicate the role of affective commitment in predicting discretionary customer responses such as advocacy, willingness to pay more (Fullerton, 2003) and co-production (Gruen et al., 2000). Gruen et al. (2000) demonstrate the positive impact of affective commitment on co-production. Moreover, customers maintaining high affective commitment to their organisation are more likely to be inclined to collaborate in co-production (Auh et al., 2007). In financial services, Auh et al. (2007) found that committed clients showed more proactive behaviour towards shaping the perceived service. Thus, the role of commitment (i.e. affective dimension) as an antecedent to the co-creation experience is not a point of interest in the current study.

### **2.5.3.2 Continuance commitment**

Commitment conceptualisations are borrowed from organisational behaviour literature, which emphasise that commitment is composed of at least two components: affective and continuance commitment (Allen & Meyer, 1990). According to Bendapudi and Berry (1997) continuance commitment is the motivational intent to continue the relationship, taking into account the high costs associated with the service and scarcity of alternatives. Continuance commitment is the degree to which a customer is in a psychological state where he/she feels attached to the organisation on the basis of the perceived costs attributed to ending the relationship (Gruen et al., 2000). Fullerton (2003) simply defined it as the extent to which the employee felt attached to the organisation, bearing in mind side bets, switching costs and scarcity of alternatives. Bansal et al. (2004) view the construct as “a constraint-based force binding the consumer to the service provider out of need” ( p. 238).

Its importance lies in its ability to explain the feeling of being trapped in a relationship and not being able to terminate it. It also describes the situation where a consumer shows continual commitment to a relationship which they could not exit due to economic or social sacrifice. In a similar way, Bendapudi and Berry (1997) argued that individuals are tied to a relationship due to switching costs, and the inability to find attractive alternatives. In summary, consumers affectively committed are attached to the service provider out of goodwill, while continually committed consumers are tied to the service provider out of need. Thus, the present study defines continuance commitment based on the work of Bendapudi and Berry (1997).

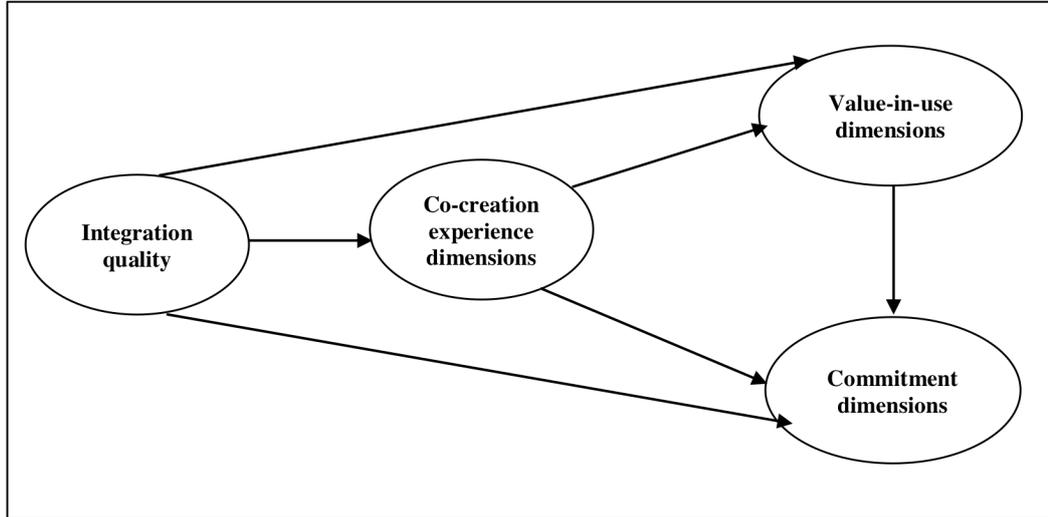
The situation of customers being attached to a relationship due to switching costs, dependence on the service provider or a lack of attractive alternatives, is well fitted within the financial industry. This is because the nature of banking products and services are time restricted which normally obliges the customer to be tied to

a certain bank. Bank products and services are usually dependent on other products. For instance, if the customer has a loan, which is usually contingent on having an account with the bank, he/she cannot easily abandon the service and switch to another bank. In this case, dependence on the service provider causes a customer to be committed by default (Jones et al., 2010).

### **2.5.3.3 Normative commitment**

According to Gruen et al. (2000) normative commitment is the degree to which a customer is psychologically engaged in a relationship based on the feeling of obligation to it. In a consumer context, normative commitment arises when the consumer remains with a service provider because they feel they ought to. Normative commitment reflects the social norm of reciprocity which is related to a variety of committed relationships such as affection, families, marriage and other intimate relationships (Bansal et al., 2004). According to Jones et al. (2010) reciprocity can happen via two ways. The first occurs when customers feel committed to provide assistance to the service company by paying more for the service or remaining faithful to the organisation. In organisational behaviour, normative commitment appears to be related to the optional behaviours that employees normally exhibit based on discretion, such as organisational citizenship behaviours (i.e. helping the firm) and putting in extra effort at work (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). The second response arises through helping other customers. An example to this is showing altruistic behaviours or providing recommendations which indirectly maximise value to the service organisation. The previous discussion is summarised in this preliminary model Figure 2.6. This study's main hypotheses are discussed in detail in Chapter 4.

**Figure 2.6: Preliminary model  
(Developed for the research)**



## ***2.6 Conclusion to chapter 2***

The current chapter reviews recent literature about S-D logic, service logic, value co-creation, value-in-use, multichannel service quality, and customer commitment. The chapter highlights the key research questions that emerge from the literature reviews and provides a preliminary model for further elaboration and testing. The next chapter outlines the methodology that is used to address the research questions.

## Chapter 3 : Methodology

### *3.1 Research paradigms*

Before conducting any type of research, comprehensive understanding to 'World view' or paradigm is of great importance. In doing so, worldview and paradigm stands for the researcher's vision of the world and hence they reflect the ways of conducting research (Creswell & Clark, 2001). Both constructs are determined by a set of (ontological or epistemological) assumptions, which underpin research inquiries (Crane, 1970). To add emphasis, epistemology is "the theory of knowledge embedded in the theoretical perspective and thereby in methodology" (Crotty, 1998, p. 3), whereas ontology pertains to the study of being (Crotty, 1998). In a simple way, epistemology is meant to understand what is the relationship between the researcher and the being researched?; however, ontology is concerned with what is the nature of reality? (Crotty, 1998).

Researchers attempted to understand assumptions about reality and 'how do we know what we know?' (Deshpande, 1983, p. 102). It is of great importance to explicate the worldview behind the method of conducting research (Creswell & Clark, 2001). As a starting point, Creswell and Clark (2001) classified worldviews into four categories: firstly, *post-positivism* is usually related to quantitative approaches. Adopting this view, researchers often obtain knowledge by claiming cause and effect thinking, compressing and reducing interrelated variables, observing and measuring of variables, verifying theories (Creswell & Clark, 2001). Contrary to post-positivism, *constructivism*, secondly, pertains to the qualitative approaches, in which research is designed to flow from the bottom up (Creswell & Clark, 2001). In specific, the inquirer starts from individuals or participants to construct broader patterns and hence to generate theory. Thirdly, *advocacy and participatory* worldviews are associated with political concerns and they are more related to qualitative approaches than the quantitative ones (Creswell & Clark, 2001). Finally, *pragmatism* is related to mixed methods

research (Creswell & Clark, 2001). It mainly concentrates on the consequences of research, the question asked and multiple methods of data collection (Creswell & Clark, 2001). Through this approach a combination of deductive and inductive thinking is utilised.

The endeavours to answer 'how we know what we know' have led philosophers to be classified into different schools of thought, such as positivism and idealism, depending on their notion of how to answer this question (Deshpande, 1983). To better understand and differentiate between the two philosophical paradigms (positivists and idealists), scientists have linked them to quantitative and qualitative approaches respectively. The two approaches are now discussed in turn.

Until recently, the debate has continued on how the two approaches are different. Several scholars assumed that the two paradigms are different based on their view of the world (Onwuegbuzie & Leech, 2005) and their perception of how to come to know what they want to know (Deshpande, 1983). Advocates of the quantitative approach believe that reality is unique and specific in nature and can be precisely measured by using the scientific approach (Onwuegbuzie & Leech, 2005). Positivist advocates believe that approaching reality and discovering knowledge is achieved through close observation and experimental testing. This approach is meant to test the viability of propositions and to confirm causal relationships through which generalisations can be achieved (Fossey, Harvey, McDermott, & Davidson, 2002). In addition to that, based on the social scientific outcomes, reliability and validity can be achieved (Johnson & Onwuegbuzie, 2004).

Moreover, positivism enables the quantification approach through which observations can be transformed into numerical data (Fossey et al., 2002). Advocates of this school of thought believe that social observations are objects of study which have to be treated as physical phenomena (Johnson & Onwuegbuzie,

2004). Moreover, the quantitative protagonists are convinced with the separate role of the researchers from the objects of the study (i.e. participants) (Johnson & Onwuegbuzie, 2004; Onwuegbuzie & Leech, 2005). In other words, researchers must not have any impact on the objects of the study (Deshpande, 1983).

Furthermore, positivists assume that social science inquiry must be objective (Johnson & Onwuegbuzie, 2004). This means that facts regarding social phenomena should be examined without the researchers' subjectivity (Deshpande, 1983). The positivist paradigm supports the deductive approach, which is based on one or more general principles through which specific prediction can be made. The positivist paradigm is described as "ungrounded, verification oriented, confirmatory, reductionist, inferential and hypothetico-deductive (Deshpande, 1983, p. 103). Moreover, from the positivists' point of view, free generalisations of time and context are desirable and possible to achieve.

In contrast, the advocates of the qualitative inquiry may adhere to the phenomenological approach. They believe in multiple realities, and generalisations of time and context are not recommended (Johnson & Onwuegbuzie, 2004). Their basic concerns lie in using language as a way to extract themes and patterns of interaction and to identify categories within social groups, by relying on subjective interpretation; this generates meaningful relationships between data to build a theory (Fossey et al., 2002). To add more emphasis, the data inductively ranges from specific to general (Johnson & Onwuegbuzie, 2004).

In other words, the qualitative approach is the scientific inquiry, which is meant to explain and examine individuals' experiences, behaviours, interactions and social context, without quantifying the data utilising statistical procedure (Fossey et al., 2002). In contrast to the positivists, advocates of the qualitative approach explain the phenomena from their own frame of reference (Reichardt & Cook, 1979). Moreover, the perception of keeping the researcher distance from the

participant is not accepted, as the subjective knower is the only source of reality (Johnson & Onwuegbuzie, 2004). In essence, the inductive approach through which explanations are generated from the data is the predominant logic within this school of thought. Contrary to quantitative research, broad questions that reflect the qualitative study's purposes, rather than specific hypotheses, are meant to be answered. To answer the broad questions, data is obtained and then the broad questions are narrowed to specific ones which lead to more focused sampling and information gathering as the study proceeds. As a consequence, qualitative studies are considered flexible and context responsive (Fossey et al., 2002).

### ***3.2 Research methods***

The quantitative methods are methods associated with statistical or experimental testing of developed hypotheses and then confirming them by utilising categorical or numerical data (Punch, 2005). In particular, they are embedded within positivist research, which emphasises the importance of understanding the resulting variables and the relationship between them (Punch, 2005). Through quantitative methods, the data is generally collected via experiments and surveys. In contrast, qualitative research represents the interpretive view. It is normally conducted within the research setting to develop a comprehensive view about participants or settings through involvement in actual experiences (Creswell, 2003). It usually adopts methods of data collection that are interactive and humanistic. Thus, methods of qualitative data collection traditionally used observations, interviews and documents (Creswell, 2003). In business research, qualitative methods have adopted interviews, focus groups and observations (Cavana et al., 2001). In summary, quantitative and qualitative are two concepts which have been used in literature to represent a wide array of research entities such as paradigms, types of data, research methods and research techniques (Sandelowski, 2003).

### ***3.3 Research design***

Research design stands for a framework or a blueprint implemented to conduct research (Malhotra, 2010). In particular, research design is defined as “all issues involved in planning and executing a research project from identifying the problem through to reporting and publishing the results” (Punch, 1998, p. 66). In fact, research design lays the foundation for conducting the research (Malhotra, 2010). It can be categorised into three main categories: exploratory, conclusive and mixed methods (Creswell, 2003; Malhotra, 2010). A discussion of each type is described below.

#### **3.3.1 Exploratory research design**

Exploratory study is an unstructured and informal type of research which is normally conducted when little knowledge is known about the research topic or when similar problems or research issues have remained unsolved (Cavana et al., 2001; Hair, Celsi, Money, Samouel, & Page, 2011; Sekaran & Bougie, 2009). To further seek meaning before developing a model, a preliminary investigation into the nature of the problem and an exploration of the phenomena has to be conducted (Cavana et al., 2001; Sekaran & Bougie, 2009; Tharenou, Donohue, & Cooper, 2007). In other words, exploratory design is used when little research has been carried out on the topic under investigation or on the population being studied (Cavana et al., 2001).

This type of research design is associated with discovering new topics, ideas and relationships and it can be conducted by applying several approaches (Hair et al., 2011); reviewing literature, for instance, is one type of exploring the topic under study (Hair et al., 2011). Although both quantitative and qualitative research can be applied to exploratory research, qualitative methods are more widely accepted (Cavana et al., 2001); for example using focus group to determine factors associated with a new phenomena or in-depth interviews to identify concerns and matters relating to a group of participants (Hair et al., 2011).

### **3.3.2 Conclusive research design**

In contrast, conclusive research design is characterised by formality and structure. It uses large, representative samples and applies quantitative analysis to the collected data (Cavana et al., 2001). Conclusive research design is usually conducted as either a descriptive research inquiry or a causal one. Descriptive research, as the construct indicates, is used to describe the related characteristics of the variables under investigation (Cavana et al., 2001; Sekaran & Bougie, 2009; Tharenou et al., 2007). In essence, it provides a profile of interrelated features of the phenomenon and is directed to examine the targeted characteristics as planned when raising the main questions of the study (Hair et al., 2011). As an example, it is conducted with the aim of describing the characteristics of a group of students. Moreover, descriptive research inquiry uses formal methods to collect data, for example conducting structured interviews with specific questions (Hair et al., 2011). Finally, descriptive research is also categorised under cross-sectional or longitudinal studies. Whereas cross-sectional is related to collecting data at a certain time, longitudinal is about collecting the data over a time period (Hair et al., 2011).

Causation or cause and effect research design is one of the most important and conventional designs used in scientific research. Beside its main purpose of providing a systematic explanation for a scientific phenomena, it also contributes to the researchers' ability to predict and control (Punch, 1998). Causal research, in essence, contributes to our understanding of whether something (e.g. an event or factor) causes a reaction (Hair et al., 2011). It is meant to investigate the idea that a change in  $x$  causes an equivalent change in  $y$ . Cause and effect can be established if three conditions are met: the first condition is temporal sequence, which emphasises that the cause should precede the effect. The second is to ensure that a relationship is found between the cause and the effect (i.e. covariance). The third condition is to determine that the existing relationship is not artificial, so that controlling other potential factors is a must. Finally, a logical explanation for the relationship must be found (Hair et al., 2011).

Whereas cause and effect research is concerned with identifying the cause associated with certain phenomenon, correlational research is designed to identify important factors associated with the phenomenon (Sekaran & Bougie, 2009). In other words, the main purpose of a correlational study is to determine whether or not there is a relationship between the variables of interest (Sekaran & Bougie, 2009). Correlational field studies (surveys) are a research design which is normally applied to evaluate the degree of correlation between independent and dependent variables (Tharenou et al., 2007). Correlational field studies (surveys) are most appropriate when the study's main objective is testing a theory by evaluating the influence of independent variables on dependent variables, with control variables and the influence of mediators or moderators (Tharenou et al., 2007). Moreover, this research method is also utilised to test hypotheses or answer research questions relying on large samples, to draw conclusions and generalise findings. It also discovers the variance between groups or the degree of independence between factors in a desired situation (Cavana et al., 2001).

### **3.3.3 Mixed methods design**

Mixed method types of investigation were brought to the fore in the 1960s, and became more widespread in the 1980s (Tashakkori & Teddlie, 1998). This incorporation of different types of methods involves assumptions, types of inquiries, research design, and analysis and inference strategies. A mixed methods approach is defined as the collection and analysis of both quantitative and qualitative data in one study (Creswell, 2003). In particular, it is meant to collect or analyse both quantitative and/or qualitative data in a single research, where through which the data are “collected concurrently or sequentially, are given priority; and involve the integration of data at one or more stages in the process of research” (Creswell, Clark, Gutmann, & Hanson, 2003, p. 212). The mixed methods design has been a widely accepted method in social sciences and business research (Cavana et al., 2001; Creswell, 2003; Punch, 2005).

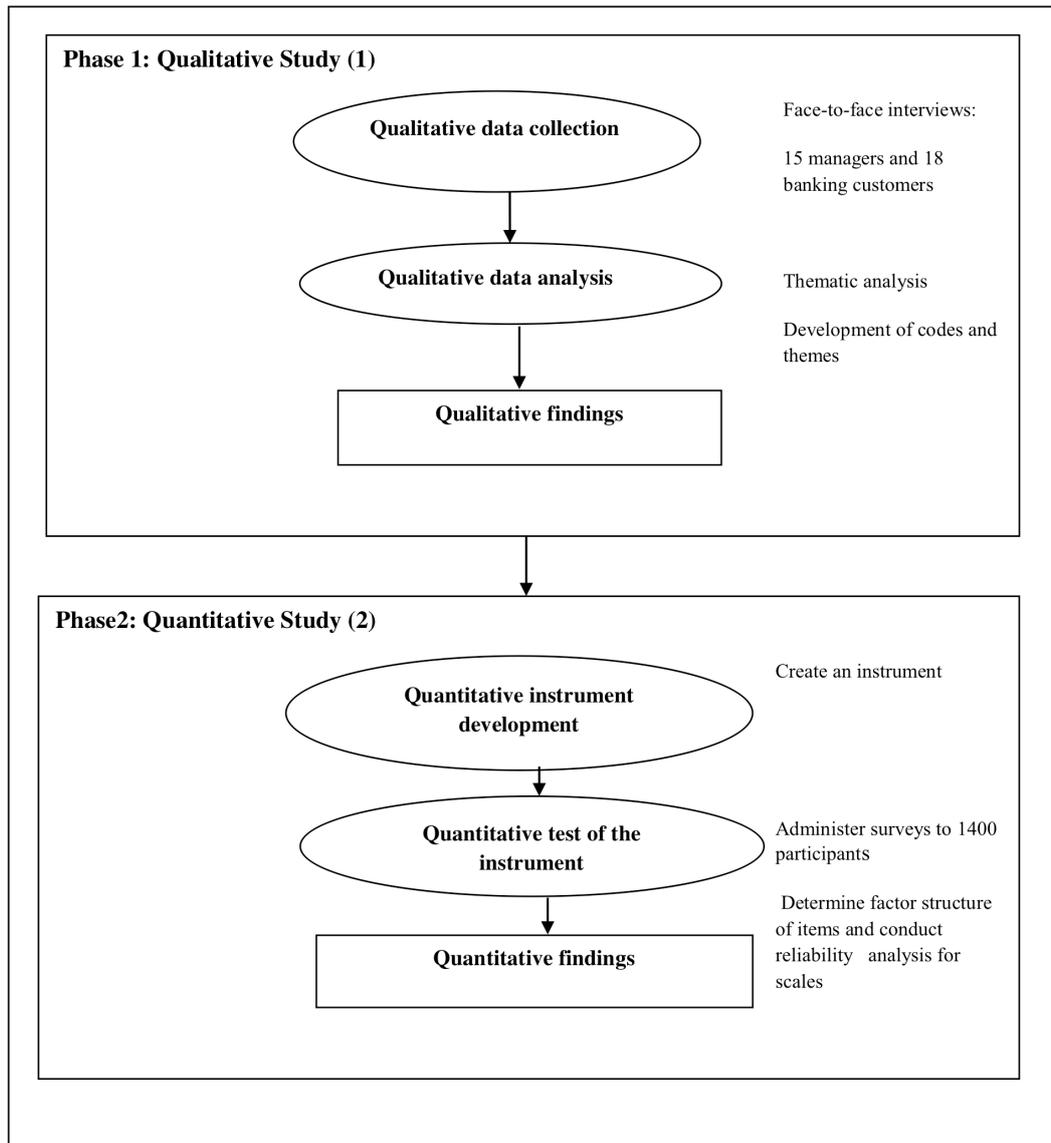
Given the fact that there are different styles of mixed methods design, four factors help in determining the most suitable style for the study to be undertaken. These factors are: the data collection method, allocating which sections will be quantitative or qualitative research, determining the stage at which the incorporation of qualitative and quantitative research appears, and the potential usage of transformational values or the action oriented perspective (Creswell et al., 2003). The four criteria for identifying the style of mixing methods lead to the emergence of six different types of blueprints that can be employed. The six types of designs based on the four criteria are: sequential explanatory, sequential exploratory, sequential transformative, concurrent triangulation, concurrent nested, and concurrent transformative (Creswell et al., 2003).

To achieve the main purposes of the current thesis, sequential exploratory design is employed. The sequential exploratory design involves two phases: the initial is a qualitative stage of data collection and analysis followed by a quantitative stage of data collection and analysis, with equal emphasis placed on both phases (Creswell et al., 2003). One of the benefits associated with this type of method is decreasing bias. This is because of the belief that biases inherent in one method can omit the biases of other methods (Creswell, 2003). The mixed methods assert that the results of one method can improve the other. It also helps in expanding the understanding from one method to another and confirms the findings (Creswell, 2003). For example, the qualitative methods may support the quantitative methods through building background information on the subject, enhancing hypothesis improvement, facilitating scale construction and obtaining information through interacting with respondents (Cavana et al., 2001; Deshpande, 1983; Punch, 2005).

As indicate previously, the present study adopts the sequential exploratory mixed method design in which the qualitative data (Study 1) is collected first to enable the researcher to interact with managers and customers, and explore their perceptions about the major areas of interest. Then, through the second phase of quantitative data collection (Study 2), the researcher tests the links between the

key variables and enlarges the sample size to achieve representativeness (Creswell, 2003). The following figure 3.1 represents the two phases of mixed methods design.

**Figure 3.1: Elaborated visualisation for mixed methods procedures adapted from Creswell et al. (2003)**



### ***3.4 The research site***

#### **3.4.1 Overview of the financial sector in Saudi Arabia**

The Kingdom of Saudi Arabia is considered the largest economy in the Middle East. It represents half of the Gulf Cooperation Council's (GCC) GDP and more than a third of the GDP of the Middle East and North Africa (Kotilaine et al., 2009). The Saudi Arabian banking sector is among the leading banking sectors in the Arabian Gulf region and the Middle East (Kotilaine et al., 2009). The banking sector in Saudi Arabia remained strong and stable during the global economic crisis and this is attributed to the Saudi Arabian Monetary Agency (SAMA) regulation and it being less exposed to USA sub-prime mortgages.

Rapid changes have been noticed in the Saudi banking sector over the past decade through a wide expansion of their operations and product diversification. There are several factors pushing for development of the banking sector, including globalisation, liberalisation of financial markets, technology improvements and innovative products (Assaf, Barros, & Matousek, 2010). The Saudi banking sector is composed of 20 banks, a combination of 12 local banks and 8 foreign banks which comprise a network of 1,646 branches and 11,766 ATMs recorded in 2011 (Saudi Arabian Monetary Agency[SAMA], 2012), see Table 3.1 (below).

**Table 3.1: Bank branches and ATM machines operating in KSA (2012)**

Banks		Branches	ATMs		
Domestic banks	Established as Saudi banks	National Commercial Bank	295	1791	
		Riyad Bank	248	2594	
		Al Rajhi Bank	455	3034	
		Samba Financial Group	69	520	
		Saudi Investment Bank	48	334	
		Bank Aljazira	51	318	
		Bank Albilad	82	586	
		Alinma Bank	37	400	
	JV with foreign partners	Saudi British Bank	82	524	
		Banque Saudi Fransi	83	437	
		The Arab National Bank	142	935	
		Saudi Hollandi Bank	44	257	
	Foreign banks	GCC Banks	Emirate NBD	1	15
			Bank Muscat	1	6
National Bank of Kuwait			1	2	
National Bank of Bahrain			1	1	
Gulf International Bank			2		
Non-GCC		Deutsche Bank	1	--	
		BNP Paribas	1	--	
		J.P. Morgan Chase N.A. Bank	1	--	
		National Bank of Pakistan	1	--	
		T. C Ziraat Bankasi A.S.	1	--	
		State Bank of India	1	--	
		Others*		12	
<b>Total</b>			1646	11766	

\*No. of ATMS excludes those belonging to SAMA.

The banks shown in Table 3.1 (above) maintain and operate the global banking model within Saudi Arabia, providing a wide variety of products and services, brokerage facilities and a broad range of facilitating services such as technology based ATM machines and points of sale (Ramady, 2010).

What makes the banking industry in Saudi Arabia further notable is its adoption of the Islamic banking system alongside the traditional banking system. This is one way of satisfying customers' needs, as Saudi society is comprised mainly of Muslims. Banking in Saudi Arabia considers the society's religious needs by providing Islamic products and services to satisfy their customers' religious beliefs. Imposed by SAMA, banks in the kingdom work on adopting the Islamic banking system, which is different from the conventional banking system, by developing sophisticated Islamic products and services.

The difference between the two systems lies in the underlying control principle, which in the case of the Islamic system is Shariah law (guiding rules based on the Holy Quran). Hence, Muslims must adhere to certain rules regarding their financial transactions, for example, the first rule is the prohibition of '*Riba*', which is normally translated as 'usury', 'interest', 'excess' or 'increase' (Khan, 2010). This means that a constant rate of return on deposits and interest on loans must not be provided by banks (Chong & Liu, 2009). The second rule is the avoidance of financial transactions that involve uncertainty (i.e. where the outcome is uncertain). The third rule requires the avoidance of financing any prohibited products (i.e. alcohol, drugs, pork, etc.) or transactions equivalent to gambling. The Islamic financial system is anchored by three major principles (Khan, 2010):

- 1. Profit-and-loss sharing (PLS):** this paradigm is the major underlying principle of all Islamic transactions. PLS is anchored in two major concepts of Islamic contracting, which are '*mudarabah*' (profit-sharing) and '*musharakah*' (joint venture) (Chong & Liu, 2009). In practice, based on PLS, all parties involved in the financial transaction equally share profits and losses. In particular, banks' assets and liabilities

are integrated in a way that enables borrowers to share profits and losses with the banks, which conversely share profits and losses with the depositors (Chong & Liu, 2009).

**2. Materiality:** all financial transactions must have “material finality,” i.e., be related to a real underlying economic transaction (Khan, 2010).

**3. Banning of exploitation:** none of the participating parties may be taken advantage of (Khan, 2010).

In addition to the distinguishing features above, the strength of the banking sector in Saudi Arabia is attributed to it being based in a leading country in oil production, and it being regulated by SAMA, which imposes rigid rules and policies to control the financial market.

Customer services in a multichannel banking context can be represented within a full range of services delivered either via interactions with service personnel within the branch or through complete self-service channels (ATMs, interactive phone systems, online banking, mobile banking). The current study focuses on customer interaction experiences through multichannel banking services (i.e. online banking, ATMs, phone banking and branch services), taking into account all types of contact with service providers (i.e. the banks). The selection of two banks for stage one of the research was based on the fact that they are the two major banks in Saudi Arabia in terms of numbers of branches and ATMs (see Table 3.1)(above), and that they were pioneers in introducing technology-based services such as online banking. Since gaining permission to recruit participants from banks is normally difficult, the researcher’s previous working experience in this sector facilitated final approval. The two banks are similar in that they each offer both the traditional and the Islamic banking systems. Two groups were interviewed, namely managers and customers. In summary, the Saudi banking system differs from western banking systems in a variety of ways and, therefore, it warrants investigation in relation to contemporary marketing concepts that have

been developed and tested in a different context.

### ***3.5 Study 1 (the qualitative stage)***

**Title: Exploration of managers' perceptions and customers' feelings about the multichannel service experience in the banking context in Saudi Arabia**

An extensive review of literature within the area of value co-creation and its antecedents and consequences, and service quality dimensions in a multichannel context (i.e. virtual, integration and physical quality), reveals a lack of adequate studies to empirically investigate the phenomena (Brodie, Pels, & Saren, 2006; Sousa & Voss, 2006). Most of the studies concerning S-D logic and value co-creation are theoretical and researchers recommend the need to empirically test the theoretical assumptions and validate the results (Ostrom et al., 2010). Conducting an exploratory study is essential, as the concept of value co-creation to date appears to be unexplored in the area of multichannel banking services. Hence, Study 1 has three main objectives:

1. To understand managers' perceptions of their bank's role in supporting co-creation opportunities with their customers.
2. To examine the meaning of value co-creation from customers' perspectives, extracted from interpretations of their experiences (customer as interpreter), and hence, to develop an instrument for Study 2 (quantitative phase).
3. To explore different opportunities for customers' resource integration in multichannel banking in Saudi Arabia (customer as an active doer).

A tentative definition of customer co-creation was established from the literature review. As mentioned in Chapter 1 & 2, it is defined as customer participation in collaborative actions with firms, which are motivated by the customer's discretionary behaviours in order to customise the service experience and hence, to co-create service value. These actions include the basic actions to facilitate core service provision and/or the proactive actions that might go beyond the limits of the provided services (developed from Bolton & Saxena-Iyer, 2009; Lusch et al., 2007; McColl-Kennedy et al., 2009).

### **3.5.1 Methods of data collection**

#### **3.5.1.1 Sampling techniques**

Given the fact that quantitative studies aim to generalise results, as a consequence, the norm of these studies is to draw on a large sample using probability techniques (Kemper, Stringfield, & Teddlie, 2003). In contrast, purely qualitative studies use small samples, which are normally selected through purposive techniques. Given the importance of purposive sampling in providing rich information for in depth studies (Patton, 1990), it is normally used to select a small sample of cases that might best illuminate and answer the research questions (Kemper et al., 2003). The sampling frame for Study 1 is composed of two groups: bank managers and banking customers in Saudi Arabia. The sample of managers was drawn from executive, Information Technology (IT), marketing and branch managers, whereas the sample of customers targets banking customers who have used multichannel banking. Managers at the banks assisted in recruiting participants.

Being one of the most efficient ways of collecting basic information, convenience sampling was the most appropriate way to choose the group of managers, while purposive sampling was selected to recruit customers for the study. The purposive sample of customers includes a small size of banking customers who are over 18 years of age. Based on the researcher's previous work experience in the banking industry, permission to contact 15 managers and 18 bank customers to participate in the study was approved.

#### **3.5.1.2 Interviews**

Although extensive theoretical arguments have occurred over S-D logic, service logic and customer logic, few studies exist which empirically explore customer-firm interaction experiences. Hence, it was necessary to get banking managers to talk about their views regarding their organisation's role in supporting customer-

firm interaction, and in turn getting to understand customers' explanations of their experiences. As co-creation is a joint process involving the organisations and their customers (Prahalad & Ramaswamy, 2004), getting to know both views enabled the researcher to understand the reciprocal interaction between organisations (i.e. banks) and their customers via multiple channels (branch services, online banking, telephone banking and ATMs).

The semi-structured face-to-face interview approach was chosen to collect data for this study, as interviews enable the researcher to collect 'thick description' (Patton, 1990), which can be interpreted thematically to answer the research questions. In-depth interviews were found to be the most appropriate method for exploring managers' and customers' views about the phenomenon. This is mainly attributed to the ability of interviews to explore individuals' views, experiences, beliefs and/or motivations on specific matters (Gill, Stewart, Treasure, & Chadwick, 2008). Given the fact that little is known about the subject under investigation, especially in a culturally different context such as Saudi Arabia, it was necessary to conduct face-to-face semi-structured interviews to seek managers' insights into the matter and to tap into customers' interaction experiences. In addition, interviewing customers provided detailed insights into their views regarding opportunities for value co-creation.

Gill et al. (2008) indicate that interviews are the best method of data inquiry when respondents may not want to discuss certain issues in a group environment. As well as knowing little about customer interaction experiences within multichannel banking in Saudi Arabia, respondents considered financial experiences private. Semi-structured interviews were chosen to better answer the research questions. This was attributed to the structure of having a set of questions which enable the interviewer to define the scope of the study and at the same time help the interviewee add as much detail as possible (Gill et al., 2008). It also enables the researcher to get as much immediate clarification as possible from the respondents (Patton, 1990). Compared to purely structured interviews, semi-structured interviews enable the respondents to elaborate on information

important to them in a particular context, which might not have been considered before in literature or by the researcher (Gill et al., 2008). Thus, one-to-one semi-structured interviews were appropriate.

### **3.5.1.3 Interview data collection**

All potential participants were invited via e-mail to participate in a face-to-face interview for up to one hour between January and February 2011. An information statement and consent form were attached to the invitation e-mail which was sent to the participants. Within the initial e-mail, participants were asked whether they were interested in participating in the interview; ten days later they were asked to decide whether to participate or not. If they accepted, they were required to complete a consent form. To give the participant a holistic view about the subject, broad interview questions were attached to the e-mail. After receiving their approval, options for dates and times for the interview were assigned to them. Once they had decided on a convenient time and place, interviewees received a reminder e-mail two working days before the interview took place.

Due to the fact that bank managers offered to assist the researcher in recruiting managerial participants, it was important that participating managers did not feel under any pressure or obligation to take part in the interview. To avoid this, it was directly stated in the information provided that their manager would not know whether or not they chose to participate in the interviews. Both groups of participants were informed that they had the right to answer the questions they wanted to and refuse those they did not want to. They were also notified of their right to discontinue the interview at any time. Participants were informed that the interview would be recorded, but not their names; instead alphabetical labelling was assigned to the tapes. Thus, no participant was going to be identified. Participants were aware of their right to claim the tape if they wished to do so.

#### **3.5.1.4 Development of interview questions**

Face-to-face interviews conducted in Study 1 aimed to explore managers' and customers' perceptions of value co-creation in the multichannel banking context, and their experiences and feelings about this interaction. The questions used in this study are as follows:

##### **Managers' questions**

Part one seeks to understand managers' perceptions of their firm's role in value facilitation.

Part two explores managers' views about factors impacting on customers during their banking experience. Probing questions explore issues about identifying the value proposition, increasing customer knowledge and skills, and organising their resources to improve customer-firm interaction.

##### **Customers' questions**

Part one seeks to gather information on the nature of multichannel services in the banking sector. Thus, the questions cover the customers' feelings about multichannel banking experiences. The questions also explore customers' opportunities for co-creation.

Part two explores customers' perceptions about their co-creation experience as a phenomenon. The term 'co-creation' is not used, but the discussion explores the underlying meaning in the context of the study. It also explores customers' perceptions of the perceived value of their interaction with multichannel banking.

Part three is used to identify the factors that contribute to creating a favourable customer banking experience. The discussion focuses on interaction and dialogue in the multichannel context.

Part four investigates customers' feelings about the bank, to identify any additional meaning associated with commitment to their banks. Appendix (B)

provides a list of the questions in the order in which they were presented to respondents during the interviews. A pilot was conducted with one bank manager and a member of the public, a multichannel banking customer. Only minor modifications to wording were deemed necessary, but several probes were developed as a result of the pilot.

### **3.5.2 Methods of analysis**

#### **Preliminary data analysis**

Preliminary data analysis is an ongoing process which is conducted as data collection occurs, by checking and seeking emergent meanings to simply identify areas that need to be followed up on (Grbich, 2009). The purpose underlying this analysis is also to gain a deeper understanding of the implied meanings in the data. It also assists the researcher in questioning where the collected data is leading or should lead (Grbich, 2009).

#### **Coding**

The qualitative phase of the current thesis was seeking further insights into theory from the literature because of the context in which it is being applied (i.e. multichannel banking in a developing country). In doing so, the method depends on semi-structured interviews followed by content analysis. Since Study 1 is exploratory by nature and aims to ascertain customers' various ways of co-creating, and to improve the measurement tool for Study 2, the selection of the Straussian three stage of coding process is justified: open, axial and selective coding.

Open coding is a process of opening the data in order to understand it. It means fragmenting the data into small segments (a word, line, sentence or a paragraph) and comparing them to one another (Lewins & Silver, 2008). Axial coding is the stage in which the emergent categories discovered in the open coding stage are linked to the subcategories that contribute to them. Finally, selective coding is an

advanced stage where the validity of identified relationships between the nominated core category and additional categories of context, interactions and outcomes is identified (Grbich, 2009).

The present study uses open and axial coding in accordance with the steps of data analysis recommended by Miles and Huberman (1994) and Tesch (1990). Miles and Huberman (1994) contributed to the literature by providing three steps for analysing qualitative data. The first step is data reduction, where the written notes or transcripts are exposed to comprehensive simplifying, abstracting and transforming (Miles & Huberman, 1994). It is an ongoing process which commences during early stages of data collection and continues as the analysis proceeds and takes the form of editing, summarising, segmenting, coding and generating themes (Miles & Huberman, 1994; Punch, 2005). Data display is the second major step after data reduction. It is simply the process of organising and classifying the data into manageable forms which allows drawing conclusions and taking further actions. Data display takes the form of tables, graphs, charts, diagrams or any form which facilitates data assembly and analysis (Punch, 2005). The final stage is conclusion drawing and verification, through which the analyst starts to understand similarities and differences among segments of data. This is the stage where regularities, patterns, clarifications, causal flaws and prepositions emerge (Miles & Huberman, 1994).

In summary, data were coded according to what was talked about, and themes were identified and reduced to categories. Further details of the method of analysis are provided in Chapter 4 with reporting of results. Data from Study 1 serves two purposes. First, it is a stand-alone study in that it provides insights into managers' and customers' perceptions of interaction experiences with multichannel banking in Saudi Arabia. Second, it is used to inform the constructs and measures for Study 2.

### ***3.6 Study 2 (the quantitative stage)***

**Title: Customers' co-creation experiences in a multichannel context: interaction experiences and outcomes**

As mentioned previously, the basic aim of Study 2 (quantitative approach) is to investigate the relative strength of factors influencing customers' co-creation experience and the consequences of them on customer responses. In particular, the study tested the relationship between independent variable integration quality in multichannel banking services and customer co-creation experience, value-in-use, and commitment. The study is based on the quantitative approach, which tests hypotheses through structural equation modelling.

#### **3.6.1 Methods of data collection**

##### **3.6.1.1 Sampling techniques**

Since the study's main objective is to investigate factors influencing customers' contribution to value co-creation in multichannel banking services, the selection of participants was based on individuals who had previous experience with multichannel banking. In fact, the study recruited participants who were current banking customers. The sampling frame for this research is guided by participants' age. In particular, age is considered an important factor since individuals under 18 years are not eligible to open bank accounts and therefore participants' ages are 18 and above. Thus, the present study recruited current banking customers, aged 18 years or more, from five of the largest banks in Jeddah, Saudi Arabia, to represent the potential population. A sample of 1,400 individuals was recruited for the study. The questionnaires were distributed to a sample of banking customers at the physical branches of the five banks. The sampling method used for Study 2 is the only method which was acceptable by the 5 banks and the researcher was not able to collect the data in any other way. This issue is further discussed in the "Limitations" section of this thesis.

### **3.6.1.2 Survey**

Due to the fact that the nature of Study 2 was correlational, the use of self-administered questionnaires was justifiable. The nature of correlational field studies (surveys) is to measure several independent variables and one or more dependent variables (Tharenou et al., 2007), which is required for Study 2. Questionnaires are always suitable for studies aimed at generating quantitative data from a representative sample in order to test hypotheses or answer the research questions (Tharenou et al., 2007). Bearing in mind that the study sought insights about customers' interaction experiences with multichannel banking, the concurrent use of both paper-based and online questionnaires was considered. However, an online survey was not utilised because of the possibility of increasing bias due to the fact that likely online respondents would be the ones who had a positive inclination to online banking. Thus, providing respondents with paper-based questionnaires aided in providing a full sample of respondents with potentially different experiences with multichannel banking services.

### **3.6.2 Instrument design and measures**

What to include in the questionnaire depends on the information required to achieve the research objectives. Reviewing the literature led to the development of a preliminary model to address the research questions, and the findings from Study 1 enabled the model to be refined. Following this prerequisite process, the questionnaire involves scales for four major constructs: integration quality, customer co-creation experience, value-in-use and customer commitment; these are explored in more detail. Basic demographic data and the respondent's historical use of multichannel banking were also sought.

To measure the main constructs, a pool of 105 items was first generated as many of customer responses related to similar items. Recommendations from Churchill (1979), DeVellis (2003) and Creswell and Clark (2011) on approaches to build measures and improve the instruments were considered. In order to filter and

group the measures, 5 academics were then asked for their opinion about items in terms of relevance, appropriateness of the factors in the instrument, wording and flow. Suggestions were made to better represent the items in terms of rewording, rephrasing and simplifying them for respondents. An important change to the main construct (i.e. co-creation experience) was made in terms of classifying the items into what the bank provides (i.e. the bank's role) and how the customer responds (i.e. the customer's role). In particular, items that measure the bank's role for instance, are a reflection of the items that measure the customers' role. In these sections items were grouped to reflect each other to be better representative of respondents' answers. This procedure produced a pool of 72 items divided between the four major constructs. Appendix (F) provides a copy of the questionnaire. Each section below looks at the four major constructs in detail.

### **3.6.3 Measurement of variables**

#### **3.6.3.1 Integration quality**

Following Sousa and Voss (2006), integration quality is a function of two main dimensions (channel-service configuration and integrated interactions) and four sub-dimensions (breadth of channel choice, transparency of channel service configuration, content consistency and process consistency); see Table 3.2 (below). The present study adapted the authors' dimensions for subsequent empirical testing in Study 2. In particular, integration quality is the first construct to be measured in Study 2. Based on Sousa and Voss's (2006) conceptualisation of the construct domain, the study adapted the potential indicators developed by the same authors to measure the construct. Items measuring this construct mainly questioned the two major dimensions of integration quality and three of the four sub-dimensions. Indicators questioning the sub-dimension (process consistency) were removed after pre-testing, due to appearing ambiguous and unclear to respondents. Items were improved and reworded to suit the context of the study. The final integration quality scale was comprised of six items (Appendix F, Section B in the questionnaire). The first two items measured breadth of channel choice, items 3 and 4 measured transparency of channel service configuration and items 5 and 6 measured 'integrated interactions' (i.e. content consistency).

**Table 3.2: Definition of integration quality and dimensions for scale development**

Key construct	Dimensions	Definition	Sub-dimension	Operational definition
<b>Integration quality</b>	Channel service configuration	The quality of the available combination of services or service components and the associated service delivery channel (Sousa & Voss, 2006)	<ul style="list-style-type: none"> <li>• Breadth of channel choice</li> <li>• Transparency of channel service configuration</li> </ul>	Respondents' perception of the degree to which they can choose among alternative channels for a given service, their ability regarding conducting transactions via single channels, and their awareness of all existing available channels and related services.
	Integrated interactions	The consistency of interactions across channels, resulting in an uniform service experience (Sousa & Voss, 2006)	<ul style="list-style-type: none"> <li>• Content consistency</li> </ul>	Respondents' perception of the degree to which multichannel banking is consistent in terms of responses to queries and previous interactions via other channels.

### 3.6.3.2 Customer co-creation experience

The literature reveals several conceptual definitions for customer value co-creation, but no single study has provided a refined scale to empirically measure the construct. Thus, a new scale for customer co-creation experience is developed by following a scale development procedure utilised by DeVellis (2003) and Creswell and Clark (2011):

1. To determine what it is going to be measured based on theoretical and qualitative findings.
2. To generate an item pool with short items as appropriate based on participant language.
3. To determine the scale of measurement for the items and the physical construction of the instrument.
4. To provide an expert review of the item pool.
5. To include validated items from other instruments where

appropriate.

6. To administer the instrument to a sample for validation.
7. To assess the items.
8. To optimise the scale length based on item performance and reliability.

Based on the definition of co-creation given in the literature and the findings of Study 1, the scale of co-creation experience was questioning customers' perception of what the bank provides and their response to these provisions in terms of three main dimensions (i.e. problem-solving, relationship development and knowledge, and learning). The three dimensions are described in detail in Chapter 4, Section 4.9 (Implications for Study 2) and defined in Table 3.3 (below). Co-creation experience scale in the questionnaire is composed of three sections (D, E and F) (see Appendix F). For example, Section D, which measures joint problem-solving and is comprised of 12 items, is divided into two sub-sections. The first 6 items measure the bank's role in terms of problem-solving and the second 6 items measure the customer's role in collaborating in the process. Table 3.3 provides a summary of the dimensions of each of the key constructs, based on the literature, analysis and discussion of the qualitative data.

**Table 3.3: Definition of co-creation experience and dimensions for scale development**

Key construct	Definition	Dimensions for scale development	Operational definition	Scale sources
<b>Co-creation experience</b>	It represents customer participation in collaborative actions with firms, which are motivated by the customer's discretionary behaviours in order to customise the service experience and hence, to produce service value. These actions include the basic actions to facilitate core service provision and/or the proactive actions that might go beyond the limits of the provided services (developed from Bolton & Saxena-Iyer, 2009; Lusch et al., 2007; McColl-Kennedy et al., 2009).	Joint problem-solving	Respondent's perception of the bank's willingness and ability to identify and solve customers' problems, and the degree of customer participation in this mutual process.	Developed for this study
		Joint relationship development	Respondent's perception of the extent to which the bank's employees and the customers are willing and able to build strong, and mutual relationships.	Customised from Gremler and Gwinner (2000)
		Joint knowledge and learning	Respondent's perception of the extent to which the bank is able to increase customers' knowledge and improve their learning, and customers' willingness and ability to utilise multichannel banking to widen their knowledge and learning.	Developed for this study

### 3.6.3.3 Value-in-use

As discussed in Chapter 2, value-in-use is defined as the comparative appreciation of reciprocal skills or services that are exchanged to obtain utility (Vargo & Lusch, 2004). Based on literature and the results of the qualitative study, value-in-use in the current study is defined here as customers' cognitive evaluation of the value generated during their use of resources and processes and their outcomes; usage can be physical, virtual, mental or a mere possession (developed from Sandström et al., 2008; Grönroos & Voima, 2012). In particular, measuring 'value-in-use' was anchored in a conceptual foundation of measuring service value according to four dimensions (technical, functional, temporal and spatial) as developed by Heinonen (2004, 2006); this is described in detail later in Chapter 4.

Extending this model was justified for several reasons: first, the four-dimensional model has a strong theoretical base and extensive literature of service quality and customer perceived value. Second, by the author's own admission, the structure of the dimensions are featured to be scalable and the related sub-dimensions can be operationalised and adapted for traditional and e-services (Heinonen, 2004). Third, the dimensions were able to jointly capture perceived benefits and sacrifice, without specifying separate questions. Apart from confirming the importance of the four dimensions in the findings of the qualitative data, a fifth dimension arose; this was the religious dimension which was found to be significant to customers who reside in the conservative and religious society of Saudi Arabia. Thus, in Study 2, value-in-use was measured as a five-dimensional construct (technical value, functional value, temporal value, spatial value and religious value).

In the absence of a scale measuring value-in-use as perceived from utilising multichannel banking, the qualitative data of Study 1, which reflects the previous dimensions, is utilised to build a new measure to be tested in Study 2. Based on the definitions of the concepts from the literature and the findings of qualitative Study 1, definitions as described in Table 3.4 were operationalised and then items

were constructed and refined. A total of 14 items representing Section C in the questionnaire were utilised to measure value-in-use.

**Table 3.4: Definition of value-in-use and dimensions for scale development**

Key construct	Definition	Dimensions for scale development	Operational definition	Scale sources
<b>Value-in-use</b>	Value-in-use is customers' cognitive evaluation of the value generated during their use of resources and processes and their outcomes; usage can be physical, virtual, mental or a mere possession (developed from Sandström et al., 2008; Grönroos & Voima, 2012).	Temporal value	Respondents' perception of time issues occurring when interacting with multichannel services.	(Developed from Heinonen, 2004, 2006)
		Spatial value	Respondents' perception of the location where the service interaction occurs.	
		Technical value	Respondents' perception of the outcomes of multichannel service performance.	
		Functional value	Respondents' perception of the process on how the service occurs.	
		Religious value	Respondents' perception of their banks' ability to consider their religion during their financial transactions.	Developed for this study

#### **3.6.3.4 Commitment dimensions**

Commitment consists of three major dimensions: affective, continuous and normative (Gruen et al., 2000). The scales to assess these dimensions use measures from organisational behaviour literature (Jones et al., 2010). These scales have been confirmed to be applicable to the marketing context (Gruen et al., 2000) and they are applicable for indicating convergent validity (Jones & Taylor, 2007). Four items from each dimension constitute the scale, which is adapted from Jones et al.'s commitment dimensions (2010).

#### **3.6.4 Pretesting and instrument design**

To identify any problems with the survey, a pre-test of the questionnaire is essential (Cavana et al., 2001). The pre-testing aims to examine the survey in terms of content, wording, language proficiency, length, and the questions' bias and flow. The pre-testing for this study occurred in two stages: first a panel of academic members and PhD students were asked to evaluate the English version of the questionnaire in terms of wording, length, flow and structure. A group of 15 colleagues was asked to pre-test the questionnaire; after one week questionnaires were returned and some changes were made regarding wording and flow. Items that were found to be similar or unclear were removed. Next, the questionnaire was translated into Arabic via the backwards translation method under the supervision of experts in both languages. The second step of pretesting was a convenience sample of banking customers (10) who were asked to pre-test the Arabic version of the survey in Saudi Arabia to ensure clarity and simplicity of the items. Items that seemed unclear to most respondents were removed as well as two items that were found to be repetitive.

The final draft of the questionnaire was composed of 72 items divided into eight sections (A-H) (see Appendix, F). The first section, A, was further divided into two parts; the first was about customers' frequency of use and was measured via a *7-point Likert-type scale (1=Never, 7=Always)*. The second part regarded the degree of customer satisfaction in terms of multichannel banking and was

measured via a 7-point Likert-type scale (1=Very dissatisfied, 7=Very satisfied). Sections B to G were measured via a 7-point Likert-type scale (1=Strongly disagree, 7=Strongly agree).

### **3.6.5 Method of analysis (quantitative)**

#### **3.6.5.1 Data analysis techniques**

Taking into consideration the nature of Study 2 and the complexity of the research model, generated data was analysed via a two stage process. The first stage uses principal components analysis (PCA) and reliability analysis. The rationale underlying the use of exploratory factor analysis is to analyse scores on several items in order to check the possibility of reducing these items to underlying dimensions. Moreover, a substantial amount of variance in the scores must be identified to allow the researcher to decide which items have to be retained or removed (Tharenou et al., 2007). PCA facilitates the evaluation of the new scales by providing a preliminary refinement of the measures developed for the study purposes.

In the second stage, Structural Equation Modelling (SEM) using the AMOS program, is utilised to conduct Confirmatory Factor Analysis (CFA) and to test the measurement model. SEM is a bundle of statistical techniques which enables a set of relationships between one or more independent variables and one or more dependent variables to be assessed (Ullman & Bentler, 2009). SEM has a number of distinctive characteristics which distinguish it from traditional measurement techniques. One of these is its capability to analyse more complex models, such as in the case of the present study, which incorporate latent variables and a hypothetical construct (Ullman & Bentler, 2009). The second characteristic is its ability to remove measurement error. This can be achieved during the examination of the relationships between factors, and hence error is estimated and removed, leaving only common variances. Finally, the last distinctive feature is that unlike regression tools, SEM combines two major steps: (1) to examine the structural model, which underlies the relationship between dependent and

independent variables, and (2) to assess the measurement model, which examines the loadings of observed items on their expected latent variables (constructs) (Gefen, Straub, & Boudreau, 2000). To conclude, CFA, via SEM tests relationships between the latent constructs and their manifesting indicators, and in this study structural modelling will be applied to test the final model.

### **3.6.6 Reliability and validity**

Finding a measure in the extant literature or developing a new measurement instrument requires an assessment of the quality of these measurements by examining their reliability and validity, which is also known as the psychometric characteristics of an instrument (Punch, 2005). In particular, using measures with low reliability and validity lead to less rigorous data (Tharenou et al., 2007). Both types of assessments will be discussed in the following section.

#### **3.6.6.1 Reliability**

Reliability simply means consistency. The conceptual definition of reliability is “the correlation between a measure and itself” and most of the variance explained must be systematic for this correlation to be high (Peter, 1981, p. 136). Reliability is also related to the degree of consistency of frequent measurements of a variable over time. In particular, there are two types of consistency: consistency over time (stability) and *internal consistency* (Punch, 2005). First, for stability of the measurement to be assessed, test-retest reliability is utilised. Test-retest is the extent to which the administration of the same instrument at two different times yields consistent results (Tharenou et al., 2007). Due to time limits and the difficulty of administering the measurement instrument twice, test-retest reliability is not applicable in the current study.

*Internal consistency* is the degree of interrelatedness among the items which are purported to assess the latent constructs. It is also the extent to which the items or indicators of the scale are consistent in terms of measuring the same construct

(Punch, 2005). Internal consistency means that all items of the scale should be measuring the same construct, and hence, they must be highly intercorrelated (Hair, Black, Babin, & Anderson, 2010). Coefficient alpha or Cronbach's alpha is one of the most popular tools for assessing internal consistency (Cronbach, 1951). Cronbach's alpha is not only used to assess the reliability of the scale measures, but also to evaluate the covariation that exists among the scale items (Cavana et al., 2001). Coefficient alpha is also defined as "a function of the extent to which items in a test have high communalities and thus low uniqueness. It is also a function of interrelatedness, although one must remember that this does not imply unidimensionality or homogeneity" (Cortina, 1993, p. 100).

Thus, in the present study, all constructs utilising multiple items will be examined to ensure internal consistency: (1) examining item-to-total correlation and the inter-item correlation; (2) confirming the unidimensionality of constructs by calculating coefficient alpha after subjecting the items to PCA (Cortina, 1993); (3) assessing reliability measures obtained from CFA.

### **3.6.6.2 Validity**

Validity is simply the extent to which the instrument measures what it is supposed to measure. Specifically, the indicator is considered valid only when it empirically demonstrates the construct it claims to measure (Punch, 2005). There are two types of construct validity: convergent validity and discriminant validity. These two types are operational types of validity (Peter, 1981). Convergent validity is when the scores generated from two different measures of the same construct are correlated, whereas discriminant validity is demonstrated when two variables are predicted to be uncorrelated and the empirical results show the opposite (Cavana et al., 2001). To evaluate convergent validity, all factors loadings for items measuring the same construct should be statistically significant (Churchill, 1979). Convergent validity will also be assessed by calculating average variance extracted (AVE), recommended by Fornell and Larcker (1981). In the case of discriminant validity, estimated sample correlation is used to

measure discriminant validity as recommended by Churchill (1979).

### ***3.7 Conclusion to chapter 3***

Chapter three presented a comprehensive discussion of the research methodology adopted in the current thesis. An overview of the research design and paradigm is provided, while a detailed explanation of the mixed methods approach is given. The justification for choosing a qualitative method for Study 1 and a quantitative method for Study 2 are discussed. A detailed explanation about the selection of data collection techniques for both studies is also justified. Moreover, a preliminary discussion of the data analysis techniques for the qualitative data is provided. Finally, PCA and SEM statistical analysis were also discussed.

To conclude, the major theoretical aim of this research is to identify the means of value co-creation and to tap into the various opportunities for customers to co-create value in a multichannel banking context in Saudi Arabia. In addition, it aims to identify the factors that influence value co-creation and the consequences of this from the customer's perspective. Specifically, the study investigates the influence of integration quality dimensions as independent variables on the value co-creation experience and subsequent effects on customers' outcomes (value-in-use, commitment). The next chapter will discuss the results of the qualitative phase of the thesis.

## **Chapter 4 : Study 1 (qualitative): an exploration of managers' perceptions and customers' feelings about the multichannel service experience in the banking context in Saudi Arabia**

### ***4.1 Introduction***

As mentioned in the previous chapters, the current research project consists of two sequential studies. Study 1 is a qualitative study, which encompasses interviews with two groups of respondents (customers and managers), while Study 2 represents the quantitative phase of the project, where a survey was administered to a sample of multichannel banking customers in Saudi Arabia. Throughout this chapter, objectives of the study are re-stated, detailed descriptions of data collection methods will be presented, and findings will be discussed and interpreted.

The main objective of this study is to seek customers' insights about the meaning of value co-creation, by exploring their interaction experiences with multichannel banking in Saudi Arabia. However, to understand the meaning of co-creation, the firms' role as value facilitator must not be ignored. Thus, managers' perceptions of their bank's role in facilitating value are also investigated.

Throughout this thesis the term value creation refers to the state where the customer is better off in some way (Grönroos, 2008). The growing body of literature investigating value creation can be categorised in three main ways: firm logic, co-creation logic and customer logic (Grönroos, 2009). In accordance with S-D logic, customers are considered co-creators by playing two roles: as a resource integrator by actually interacting with firms, and as an interpreter of their experiences. As a consequence, understanding managers' perceptions as value facilitators and customers' approaches to their experiences in multichannel banking is important.

## ***4.2 Data Collection***

As discussed above, the data for the present study took the form of 33 face-to-face interviews made up of two groups: banking managers and customers. Respondents were recruited by a manager in each bank who agreed to assist in recruiting participants for both groups.

Respondents for the manager group were selected by the senior manager in the head office, according to their suitability to contribute to the study. In particular, managers were selected to give a sample that reflects experience and a range of functions including marketing and IT. Customer respondents were recruited by the identified managers; the researcher did not have any access to the respondents' contact details. The identified managers started the process by distributing the invitation e-mail for the study (see Appendix, C), and once gaining approval from respondents, managers organised the time and place for the interview with the respondent. The managers then called the researcher to inform them of the details. The invitation e-mail explained the purpose of the study, participants' confidentiality and anonymity. With consideration to ethical issues, an information statement and the interview questions were also sent to respondents before the interview (see Appendix, B). As a consequence, on the day of the interview, the participants had an idea of what the interview would be about.

To encourage free disclosure of interviewees' experiences, the interviewer introduced herself with a briefing about the purpose of the study and the use of the voice recorder. Interviewees were informed of their right to stop the recorder at any time during the interview process. They were also personally assured about their confidentiality and anonymity. Once they started talking, the interviewer established a positive rapport through showing respect and interest in the importance of what they were saying, and by actively listening to their experiences. In cases where the interviewee struggled to understand a question, the interviewer repeated it in detail while casting probing inquiries to aid them in recalling ideas. The interviewer kept listening attentively to customer incidents

and experiences without interrupting them, and after finishing the discourse, the interviewer asked for clarification on certain issues or ideas by asking the interviewee to provide examples. The interviewer also asked participants to further elaborate on their reasons for drawing certain conclusions and for having certain impressions, and what led to these. Additionally, the researcher confirmed each question by reflecting their answers to ensure that they were correctly recorded and interpreted.

Interviewees in the managers' group were asked about their firms' role in facilitating value for their customers (Grönroos, 2009), and how their firms were working on supporting customer-firm interaction (Prahalad & Ramaswamy, 2004). Interviewees were asked about issues in identifying the value proposition, how they work on identifying and solving customers' problems and how they assist their decision making. Moreover, interviewees were questioned about customers' increasing knowledge and skills, and how they –the managers– were organising their resources to improve customer-firm interaction. The interviewees were also asked about factors that might influence customers' experiences with multichannel banking, (see Appendix B for managers' questions).

The customer interviews began with questions about their preferred channels for conducting banking transactions, how/why/when they used multichannel banking or single channels for certain transactions. The introductory questions were to provoke thoughts about their interaction experiences. Interviewees were asked to comprehensively describe their experience with multichannel banking; for example, what values were received from that interaction, what makes a good or bad experience and what factors contribute to creating a favourable or unfavourable experience and why? (see Appendix B). Interviewees then talked about their extent of using of multichannel banking and why they choose a particular channel instead of another, and when/where they prefer different channels. They also recalled positive and negative experiences that they had and what factors might contribute to their experiences. At the end of the interview, the researcher concluded that there were no further questions and then asked the

interviewees if they had any further points they would like to discuss, or ask the interviewer about, before finishing. The debriefing was established after the recorder was turned off; some of the respondents continued speaking about issues, and the interviewer asked their permission to report on some of the important things that might have emerged during these informal conversations. Table 4.1 displays the basic descriptions of respondents; respondents' names were replaced by codes to ensure anonymity. In particular, managers' names were replaced by the letter M, number in group and letters BA and BB for Banks identification (e.g. M1BA)

**Table 4.1: Description of respondents**

Group	Respondent code	Occupation	Gender
Banking Customers	C1	Private company employee	Female
	C2	Civil Engineer	Male
	C3	Accountant	Male
	C4	Accountant	Male
	C5	Computer Science Engineer	Male
	C6	Private company employee	Male
	C7	Academic	Female
	C8	Academic	Male
	C9	Academic	Female
	C10	Academic	Male
	C11	Academic	Male
	C12	Teacher	Female
	C13	Teaching Supervisor	Female
	C14	Businessman	Male
	C15	Businesswoman	Female
	C16	Private company employee	Female
	C17	Lab Medicine Administrator	Female
	C18	Businessman	Male
Banking Managers	M1 BA	Branch Manager	Male
	M2 BA	Branch Manager	Male
	M3 BA	Branch Manager	Male
	M4 BA	Branch Manager	Male
	M5 BA	Executive	Male
	M6 BA	Executive	Male
	M7 BA	Product Manager	Male
	M8 BA	Relationship Manager	Male
	M9 BB	Executive	Male
	M10 BB	Executive	Female
	M11BB	Branch Manager	Female
	M12 BB	Branch Manager	Male
	M13 BB	Relationship Manager	Female
	M14 BB	Relationship Manager	Male
	M15 BB	Marketing Manager	Male

### 4.2.1 Sample description

The sample consisted of 33 respondents in total distributed between two groups (15 managers, 18 customers). The interviews were conducted until saturation was achieved; saturation was assumed to have been reached when the interviews did not produce any new insights. In particular, 15 managers' interviews were conducted, and with the last two no new insights were gained. The managers' sample was diverse in terms of the managers' specialisation (executives, marketing managers, branch managers, relationship manager (RM), and product manager), gender, and years of work experience. The sample of customers was diverse in terms of age, gender and their number of banking experiences. The following tables (4.2 and 4.3) describe the characteristics of each sample.

**Table 4.2: Characteristics of the sample of managers' participants**

Bank		Bank A	Bank B
<b>Number of participants</b>	Total	8	7
	Executives	2	2
	Marketing Manager	-	1
	Branch manager	4	2
	Product manager	1	-
	Relationship Manager	1	2
<b>Gender</b>	Male	8	4
	Female	-	3
<b>Years of work experience</b>	5 to10	1	2
	over 10	3	3
	over 15	4	2

**Table 4.3: Characteristics of customers' respondents**

<b>Bank</b>	<b>Bank A</b>	<b>Bank B</b>
<b>Number of participants from each bank</b>	10	8
<b>Gender</b>	Male	10
	Female	8
<b>Level of education</b>	High school	
	Graduate	13
	Postgraduate	5
<b>Age</b>	18 to 24	
	25 to 34	6
	35 to 44	6
	45 to 54	4
	55 to 64	2

### ***4.3 Method of analysis***

The processes for analysing qualitative data in terms of transcription, coding, categorisation and interpretation were followed based on the procedures recommended by Miles and Huberman (1994) and Tesch (1990). A holistic approach to analysing data inductively was undertaken based on the research questions developed in Chapter 2. The qualitative data was analysed following the steps of Miles and Huberman (1994): data reduction, data displays and conclusion drawing/verification. During the actual data collection, the researcher started the preliminary data analysis, and once the meaning of each segment of data was identified, Tesch's (1990) content coding steps were followed. During the early stages of data collection, the researcher listened attentively to the recorder and the data was transcribed verbatim. Most of interviews (30 out of 33) were in Arabic language according to interviewees' choice, so the initial transcripts were written in Arabic and then the researcher translated these transcripts back into English. During data reduction, coding the transcripts to generate topics was first conducted, and then codes were grouped into meaningful

clusters to compose themes. The transcripts were coded based on the major questions asked, through using key coding terms from the transcripts, until stable patterns were found. Data reduction is simply allocating a segment from an interview to represent other similar pieces of data (Tesch, 1990). Thus, data reduction in the present study was achieved by content coding and establishing themes. The process identifies and classifies meaningful codes to represent what respondents talked about (Tesch, 1990).

The second phase utilised matrix displays to compose the retrieved themes into a manageable and precise form to facilitate the final interpretation (Miles & Huberman, 1994). Due to the limited sample size, matrix tables proved to be more suitable in Study 1. Throughout the data display phase, the emergent themes were displayed in matrices according to their absolute frequency in the data. Through these tables, the researcher was able to verify the strength of the themes as emphasised through the number of recurring codes in the transcripts (Lee, 1999). The third phase involves the interpretation stage through which the real interpretation of the categorised data and the actual examination of its plausibility are emphasised. This final phase involves inferences drawn from the 'data display' when relevant to the research purposes. The researcher conducted the previous analysis (i.e. thematic analysis) on each group of respondents (i.e. managers and customers) separately. Managers' interviews were first analysed to determine situations where banks facilitate value and provide banking customers with a space to collaborate with them. Customer interviews were then analysed to identify the situations in which they permit their banks to interact with them to facilitate value, and hence allow value co-creation opportunities to occur.

#### ***4.4 Validity and reliability of the qualitative data***

Many scholars highlight the necessity to emphasise validity and reliability throughout a qualitative study (Creswell, 2007; Patton, 1990). Several attempts have been made by scholars to emphasise the importance of validity, its definitions, terms to describe it and ways to establish it (Creswell, 2007; LeCompte & Goetz, 1982; Lincoln & Guba, 1985). According to Hammersley

(1992), validity stands for the extent to which the study represents the social phenomenon that the researcher is attempting to measure. Reliability represents the extent to which the measures are consistent in terms of being error free when the study is applied to the same category by a different observer, or a different occasion by the same observer (Hammersley, 1992). Although several scholars argued that these two terms are not applicable in qualitative research, attempts have been made to apply them to qualitative data. LeCompte and Goetz (1982) utilised parallel quantitative equivalents in experimental and survey research to measure the validity and reliability of qualitative data. The terms used are internal validity, external validity, reliability and objectivity. Based on naturalistic research, Lincoln and Guba (1985) utilised alternative terms such as credibility, transferability, dependability and confirmability respectively to stand for the quantitative equivalents. The following sections discuss the key aspects of internal and external validity, (i.e. credibility and transferability) in relation to the current study; however, dependability and confirmability can not be applied to this study because of its qualitative nature.

#### **4.4.1 Credibility**

Credibility of the qualitative data means the degree to which the data are believable, based on the researcher's assessment of the interviewees. With regards to the managers group, all interviewees were employees of the two participating banks. Most of them had been involved in the banking industry for more than ten years. The majority of the managers ranged from executives to branch managers. The executives were able to describe the strategic and operational sides of the industry, whereas the branch managers covered the customer-firm interaction side. Thus, the researcher assumed that they were industry experts and were capable of providing credible information from the managerial perspective. For the customers, all of the interviewees were multichannel banking users. They were also educated, and most of them had banking experience with more than one bank. Hence, the researcher assumed that they were capable of providing credible information about their banking experience.

#### **4.4.2 Transferability**

Transferability represents the extent to which the results of the study can be generalised or transferred to other contexts or settings (Zikmund & Babin, 2003). Providing rich and detailed descriptions of the participants or settings enables the reader to make decisions regarding transferability (Lincoln & Guba, 1985). Hence, the present study provides extensive details regarding the interviewees and the study's settings to enable the reader to determine the transferability dimension. No assumptions or claims are made that the findings will represent the population in Saudi Arabia or the situation in other countries. However, testing for generalisability will be conducted in Study 2, when a larger sample is used in a cross-sectional study.

### ***4.5 Summary of findings***

#### **4.5.1 Managers' responses**

The analyses of the first group of respondents (managers) began with answers to the main research question 'How do managers perceive the role of their firms as value facilitators in a multichannel banking context?'. This question aimed to provide potential insights into managing mutual interactions with banking customers to facilitate value. This section shows major themes that emerged in the data and how they contribute to facilitating value co-creation opportunities. Respondent quotes are used to emphasise their point of view. Based on a holistic analysis, Table 4.4 (below) displays 12 major themes that emerged from the data reduction process. For example, much discussion was dedicated to the sphere of problem-solving in which banks mutually interact with customers to identify their problems and find suitable solutions. The table shows the themes and topics, their absolute frequencies, the number of respondents who talked about the theme (out of a total of 15 interviewees) and the percentages of the total number of respondents.

**Table 4.4: Themes and topics resulting from content analysis of interviews with managers**

Theme	Absolute frequency	Number of respondents	Percentage of total
<b>1 Problem-solving</b> (Identifying problems, complaint delivery, tracking, responsiveness)	110	13	86 %
<b>2 Understanding customers' needs</b> (Listen to the voice of the customer, establishing an effective dialogue, personalised services, customised products and services, face-to-face dialogue, suggestions delivery)	102	11	73%
<b>3 Building strong relationships with customers</b> (Building personal relationships with customers, assigning customer relationship managers (RMs) or advisories)	46	8	53%
<b>4 Environment</b> (Physical branches, employee behaviour)	39	11	73%
<b>5 Availability/convenience</b> (Saving customer time and effort, carrying out transactions whenever and wherever convenient)	30	8	53%
<b>6 Widening customer knowledge and skills</b> (Advertisements, offline and online updates)	27	4	26%
<b>7 Breadth of channels choice</b>	26	6	40%
<b>8 Efficiency/interactivity</b>	16	4	26%
<b>9 Comprehensiveness</b>	12	5	33%
<b>10 Incentives</b>	12	6	40%
<b>11 Satisfying religion and societal concerns</b>	9	4	26%
<b>12 Security measures</b>	9	2	13%

Each major theme is now discussed.

#### **4.5.1.1 Problem-solving**

Problem-solving strategies introduced by managers were emphasised as an essential factor to facilitate value creation for their customers. The significance of this factor is demonstrated through bank managers' competence and ability to easily *identify customers' problems* either when they report them or before they occur to minimise subsequent risks.

*...Understanding customer needs enables us to provide future benefits thus, we can help the customer to avoid facing problems or future obstacles."* MI BA

Another important dimension under this theme is being *responsive to customers' problems* when they occur and being proactive when providing corrective and complete solutions to their problems. The managers emphasised the importance of proactively providing quick and complete solutions to customers' problems as one way of creating more value for them.

*"For example, one of our customers reported to the manager via e-mail that her credit card was not working while she was abroad, and she was in trouble and was asking the manager to quickly fix the problem urgently as she needed the card. The manager promptly examined her account and found out that the customer had spent the credit limit without realising. The manager then advised the customer to pay the debt online to be able to use the card, and as I mentioned before, credit card payments are finalised at the same moment of payment as this is one of our bank's competitive advantages." M10 BB*

Another critical dimension under this theme is *facilitating several ways for customers to report their problems* and/or queries. Two managers of Bank A emphasised that their bank assigned a special department to handle customers' problems; here a diverse range of tools are provided for customers to deliver their voice (i.e. problems and/or complaints). The diversity of ways for customers to interact with the bank regarding problems was intentionally established to enable the customer to choose the best-suited tool for the place and time where/when the problem occurs.

*...I mean the customer now can deliver his/her complaints via mail, email, each one has its own procedures. For example if a customer delivered a complaint online it takes a different route from the person who complained through the branches. Now, with the new direction, we have one consistent team to receive the complaints, and make sure it is directed well. Thus, problems are solved based on the customer's expectation not on the platform availability. M5BA*

In addition to the importance of the proactive response to customers' problems, *timing and tracking* are important dimensions for this process to be successful and integrated.

*"...We assist the customers to solve their problems through first providing 5 channels to communicate, second giving a reference number to track the progress of their problems and concerns, third we have a service level agreement to reply to the problem as per customers' expectations." M5BA*

Similarly, manager M6BA affirmed the same idea, that the bank facilitates multiple and diverse channels for customers to report problems, concerns and queries.

#### **4.5.1.2 Understanding customers' needs**

Understanding customers' needs was the second most frequent topic among respondents and its dimensions are interrelated. This theme emphasises managers' perception of the transformation *from the firm-centric approach to the customer-centric approach* in which the customer is the main focus.

*"...You have to know that the core is the customer. We are a retail bank and we have corporate banking, but customers are the back bone, and customer satisfaction is very important and we have different loyalty programs to make sure that the customer is satisfied." M6BA*

*Listening to the voice of the customer* is one dimension of this theme and has been identified as a critical way to construct individualised experiences. Listening to the voice of the customer is mainly demonstrated by dialogue either through a face-to-face interaction with employees or via communication technologies. The managers admitted that the ability to *establish interactive dialogue* with customers is an indication of an employee's success.

*"...to conduct an effective dialogue with customers is an agreed upon norm*

*that all employees all over the organisation work to support; the employee knows that his/her interaction with customers will lead to his/her career success” M12BB.*

The interviewees (managers) also agreed on the importance of dialogue to identify problems, understand customers’ needs, and thus *provide complete solutions to problems, personalised requests or customised products*. Interviewees reported different cases where customers interacted with the bank to request a change within the features of a used product or to ask for a reconstruction of service attributes.

*“...for example one customer asked us to change the duration of his statement; to receive a statement of his account every 6 months, instead of monthly.... Based upon his desire, we changed the duration of his statements. Another example is a customer who had an advantage of credit card limit up to 200,000 SAR, which he did not need and could conversely affect him..., so he asked to minimise the amount. Others asked for dividing the credit card payments as monthly premiums...” M12BB*

Understanding customers’ needs overlaps with an important emerging theme which will be discussed later, *relationship development*. Understanding customers’ needs and wants and working to achieving them create a good impression for the customer about the quality of services provided. A relationship manager of Bank B stressed that one of the most important factors in creating a favourable customer experience is the employee’s ability to understand customers’ needs and show them *respect and care*. Any employee wishing to succeed in this mission should be a good listener, M13BB emphasised.

*“.. it is an important part of the bank’s operations that the employee should be a good listener to the customer and that God has given us two ears and one tongue to listen more than talk and the customers always like to be listened to attentively.” M13BB*

Recently, *interaction with customers* has moved to different levels with new approaches such as questionnaires and weekly parties. One of the managers affirmed that employees at her branch were asked to distribute a questionnaire to each customer entering the branch; it asked three questions: How do customers find our services? What services other than what we provide would customers like to have? What are customers' comments and suggestions to optimise the bank services?

*"...One of our strategies to understand our customers' needs and wants is through providing questionnaires. The questionnaires are mainly questioning customers about the type of services that they need. Through questionnaires, we are able to identify what customers need and what their opinions are regarding optimising products and services." M11BB*

In a similar vein, both managers (M11BB and M12BB) affirmed that a new style to enable customers' live interaction with the bank was via the *weekly parties* called "tea parties". They invited a sample of customers to attend a party at a branch and asked them to talk about their experiences with the bank, their needs and problems that they might have had with the bank, and to provide possible solutions to these problems. An executive manager (M10BB) agreed with the importance of *understanding customers' needs* by listening to them attentively and facilitating opportunities for them to express their feelings towards the bank and expose their concerns.

*"...Thus we found that the weekly parties are very useful to discuss customers' problems and work on solving them. Actually it gives us the chance to be close to the customer, hear their voice and be able to create more benefits for them." M10 BB*

The executive also confirmed that ideas and concerns that customers provided via these parties were sent to her on a weekly basis and responses are analysed to identify problems and recommend solutions. She then sent them to higher authorities within the bank to be approved. She showed the researcher on the

screen how customers' suggestions are classified in tables for further action.

#### **4.5.1.3 Building strong relationships with customers**

The third theme displayed in Table 4.4 concerns relationships. Managers from both banks agreed on *the importance of building good relationships* with their customers. They stressed that all customers must have excellent service quality that exceeds their expectations. Managers believe that building good relationships with their customers enables them to satisfy their customers' needs easily as they will be able to interact with them effectively. Some of the managers indicated that their relationship with their customers was close to being a personal one. They affirmed that this *relationship is of a mutual nature* as some of their customers share the same feelings concerning building a mutual relationship. For example, some customers invited them to attend their personal occasions.

*“...Personal relationships that we built with customers are the basis for providing benefits and services to them. The bank always urges us to form strong relationships with our customers and this is through asking about them after the service delivery, visiting them at special events, and sending them gifts regularly in occasions and events. For example some of my clients come to the branch not to request a service or product, but to visit the branch and staff, in order to socialize, carry out dialogues and to spend time.” MIBA*

An executive manager confirmed the importance of *relationship development* and maintenance through personal contact with customers by saying:

*“When we build good relationships with our customers, they feel comfortable and intimate with us. Sometimes the customers invite us to their special occasions. I also make sure to call them on religious and special events to give them the impression that I am concerned about them. Hence, I have succeeded in building strong and close relationships with my customers.” M10BB*

Building relationships appears to be especially critical with regards to high net worth customers. This category of customers is *assigned a relationship manager* (RM) who is responsible for a certain number of customers to provide them with distinguished service. In particular, these employees are responsible for managing the customers' accounts, updating them with new offers and services, and providing them with customised products that suit their desires, such as customised portfolios. This RM has to serve the customer at any time of the day, as the customer has their mobile number to call whenever they desire. The same manager confirmed the fact that even when he was promoted to a higher position, some of his customers still asked for him to serve them and refused to be served by any other manager:

*"... for example this customer who has just called is one of my customers when I was an RM and he called me at any time during the day sometimes at 1.a.m and I should answer him as he is one of our high net worth customers, a very important one, you know he did not like to be served by any other manager except me." M9BB*

An RM (M13BB) also emphasised that building a good relationship with customers seems to be crucial when dealing with high net worth customers. She claims that customers in this category are normally a busy type of customer who prefers online interactions. She also stressed that this facility saves customers' time and effort, and enables her to conduct their transactions or respond to their queries promptly.

Besides the previous discussion on the important role that *relationship development* plays in constructing an effective interaction between customers and their bank, manager M13BB introduced a new way of enhancing this relationship. The manager indicated that one way of strengthening and supporting mutual relationship building was by *supporting customers in their own businesses*. This was demonstrated through enabling customers to promote their business via the banks' public events:

*“Another way that the bank supports the relationship with its customers is supporting the customers with their own businesses. For instance, one of our customers has asked us to exhibit his company name and logo while doing one of the bank activities. This can be done by providing the customer with a corner of space during our activity in order to promote his business and exhibit it to our expected visitors and customers.” M13BB*

The previous discussion revealed the importance of building and maintaining relationships with customers, to create and maximise value for both parties (i.e. the banks and their customers).

#### **4.5.1.4 Environment**

Most managers emphasised the *importance of servicescape* to create favourable experiences for their customers. This servicescape enables them to support customers to create more value, either during branch visits when dealing face-to-face with bank employees, or while using the resources available at branches. The managers specify that cleanliness in the branches, location of the branch, employees’ treatment and behaviour are the most important factors. A branch manager from Bank A states the following:

*“Among the most important things that provide a unique service is the cleanliness of the branch, employees’ treatment and behaviour, geographical location of the branch and availability of sufficient car parking.” M1BA.*

An executive manager at Bank A confirmed the importance of *branch location and the quality of infrastructure* surrounding the branch as critical factors in creating favourable experiences. He considers that 60% to 70% of a customer’s experience depends on the bank resources and the rest depends on the city’s infrastructure:

*“...We received some complaints concerning one of our main branches. The complaint was that customers could not reach the branch as the streets*

*surrounding the branch were destroyed, so they could not get there. They said 'other banks' branches are located in better locations than yours.' Our bank normally chooses its locations carefully, but we could not work on repairing the streets and roads surrounding the branch." M5BA*

The managers agreed on the importance of *employees as an influential resource* that might impact on customers' behaviour. They maintained that an employee, whose manner was thorough and understanding, created a good impression on the customer; this might lead to loyalty and positive feedback spread by word of mouth. An executive manager admitted that this type of employee leads to customers being loyal to the employee. She emphasised this point of view:

*"Therefore, the bank seeks to choose employees very carefully and prepare them to be qualified to provide the best service to our customers. If the customer is acquainted with an employee, I mean if he/she feels comfortable when dealing with a certain employee and this employee has left the bank, the customer might follow the employee and not the organisation. Most bank products are the same but what makes a difference is the quality of service and who is offering it. Customers always like to be asked about, taken care of, and promptly interacted with to solve their problems. Through this strategy, customers become more loyal to the employee; wherever I go the customer will follow me." M10BB*

#### **4.5.1.5 Availability/convenience**

Most managers' responses to the question "how do you perceive your bank's role in facilitating value?" was through *facilitating self-service technologies*. Focusing on technologies as a means of facilitating value for customers is a topic which has been discussed intensively by managers from different perspectives. Some of them believed that these alternative channels contribute to the temporal value aspects perceived when using these channels. Others argued that the channels' ability to create value related to the importance of the space/location where the service was provided. Some managers believed that alternative

channels enable the bank to provide services to the customer 24/7, as they provide flexibility by enabling the customers to utilise their resources whenever and wherever convenient. A manager from bank B stated the following:

*“I think one of the most important values is facilitating banking transactions to customers instead of doing them through physical branches. This will save customers time and effort. Internet banking in our bank is a useful tool as it is comprehensive, so easy, and so comfortable. The customer is able to conduct most of his/her banking transactions while lying in bed. Customers can use the ATM machines while driving their cars. The customers can also do their transactions through the mobile banking.” M11BB*

Another manager indicated the importance of *designating special places in the branch* for customers to be served in, by saying:

*“Another value given to affluent customers is providing them with a special and private room in cooperation with Riyad Capital, through which they could buy or sell their stock shares anytime. This service is to enhance their privacy and convenience and they are provided with whatever they like for drinks as a means of the bank’s hospitality.” M13BB*

#### **4.5.1.6 Widening customer knowledge and learning**

Managers believe in the importance of *widening customers’ knowledge and learning* so that they can maximise the benefits available from the bank. The key aspect of this argument is that this process can be achieved through different methods. Some of the interviewees indicated that an essential part of this process took place in the branch through face-to-face interactions. Customers’ knowledge and learning refers to the customers’ general knowledge about the banks’ products, new offers, and new services, and customers’ learning is related to their ability to interact with employees to learn how to utilise the banks resources (i.e. technology-based channels). The managers emphasised that increasing both knowledge and learning can be done by either showing the customers how to use the bank’s resources (e.g. ATM machines, online banking)

or by educating them about the best ways to use the bank's products (e.g. brochures, CDs). The last and most effective way is through providing free lectures and seminars to educate customers. A manager from bank B indicates that giving free lectures to a segment of customers increases the mutual benefits:

*"...Actually I gave some lectures to many institutions such as the Aviation Academy, a hospital, and the border guards' institutions. They were given lectures for about an hour to an hour and a half. It was a process of widening customers' knowledge. Even the general presidency of meteorology and environment protection, were given the same type of lectures in a hall and even the chief executives attended them. The main purpose of the given lectures was widening customers' knowledge to utilise the bank's products for their own benefit, rather than inadvertently use it to adversely impact them."*

*M12 BB*

#### **4.5.1.7 Breadth of channel choice**

This theme has also been considered way of facilitating customer value creation. Managers claimed that enabling customers to choose between different channels that suit their needs is another way of facilitating value creation. Managers indicated that banks are investing in alternative channels to create mutual benefits for their customers and for the bank as an organisation. A manager at Bank A claimed that familiarising customers with alternative channels would lead to minimising error rates in the branches:

*"...I think the purpose of doing such a thing is to manage traffic, as it relieves pressure from a branch to an alternative channel; as a result, we can provide more quality of service to customers in branches, giving more time to people through hospitality and even more selling. This is because the branch error rate will go down."* M6BA

Managers claimed that their banks urge customers to use alternative channels and to choose between alternatives that best suit their needs. It is notable that *breadth of channel choice* might lead the customer to create more value related to time

and place. Hence, it is assumed that *breadth of channel choice* might be positively related to temporal and spatial value.

#### **4.5.1.8 Efficiency/interactivity**

Under this theme, managers accentuated the fact that new technologies, such as online banking and e-mails, enabled them to achieve *efficient and effective interaction* with their customers. Managers indicated that online interaction enabled them to interact with their customers wherever they were. Online interaction via e-mails enables them to manage their customers' accounts, and update them with new offers and services. A branch manager at Bank B emphasised the importance of emails as a means of interacting with customers. An RM in the same Bank (B) confirmed this view:

*“Add to that, through the online services, due to customers' time limits, they could send queries about services or products such as credit facilities or interest rates, and I could promptly answer their queries. Customers sometimes ask about our competitive advantage compared to other banks. I also use e-mails to widen customers' knowledge of our services that they can use and benefit from.” M13BB*

Another manager confirmed the *efficiency of technology-based channels* to inform customers of all transactions that are completed. Three managers indicated that sending confirmation messages (SMS) to customers' mobiles made them aware of recent transactions in their accounts. An RM stressed the importance of this facility which is evident in this excerpt:

*“...Once the customer utilises any of the banking channels, the customer will immediately receive an SMS message on his/her mobile to allow the customer to follow up on his/her accounts” M13BB.*

The managers also indicated that technology-based services aid customers in conducting their banking transactions with ease. This is because they are

designed to be easy to use and to suit different customers.

#### **4.5.1.9 Comprehensiveness**

In addition to all the previous features of multiple banking channels, such as value facilitation, 25% of managers emphasised that multichannel banking (i.e. online, phone and ATMs) is *comprehensive* in terms of enabling the customers to conduct almost all the transactions that they normally need.

*“The bank provides advanced and developed technologies, tools and trained employees to help the customers carry out their transactions easily. This is achieved through facilitating the transactions for customers via internet banking, ATM machines and phone banking. Through these tools the customer is able to conduct most of the banking transactions at their convenience, except withdrawing over their cash limit.” MI1BB*

#### **4.5.1.10 Incentives**

Another way of creating value for customers is by providing them with *incentives* such as discounted services. Accordingly, to motivate customers to use alternative channels, the bank provides discounted services to customers who choose to use online as opposed to offline services.

*“There are discounts offered to the customers when using the electronic channels, such as the cost of the transfer of funds to the Arab countries is 50 SAR if done from the branch, while it can reach a value of 40 SAR or even less if done via the internet. The case is similar with regards to transferring to European countries. This is an encouragement from the bank to support customer interaction with these channels.” MI2BB*

Another manager confirmed the same view:

*“To motivate the customers to use the new service, the bank reduces transfer fees compared to the one conducted at physical branches. Thus, the bank facilitates value through orienting and motivating the customers to use*

*advanced technologies.” M11BB*

#### **4.5.1.11 Satisfying religion and societal concerns**

One of the themes that emerged, which facilitates value creation, is *satisfying customers’ religious beliefs*. As discussed previously in this chapter, banks in Saudi Arabia aim to take Islamic rules into consideration in terms of the way they operate the banks and develop their products. Interviewees maintained that having Islamic products creates value for customers who insist on adherence to Islamic “Shariah”. An executive at Bank B accentuated this fact:

*“One of the values that we give to our customers is designing Islamic products which meet customers’ religious and cultural needs, as we are a 100% Islamic society. Based upon the customer’s desire we created these products and provided them to the customers.” M9BB*

A manager at Bank A also confirmed the value of providing Islamic products to their customers:

*“Actually, my bank provides our customers with Islamic products that suit their Islamic concerns regarding usury. The bank provides the traditional products and the Islamic products, and the customer chooses what suits his/her desires.” M2BA*

#### **4.5.1.12 Security**

Interviewees stressed the importance of creating a *safe and secure environment* for their customers when carrying out banking services via alternative channels. Managers of Bank B explained different methods provided by the bank to create safe and secure environments for their banking customers. As noted above, one way is to send authentication codes to customers’ mobiles after they complete transactions online. Alternatively, these codes can be sent to a cipher token (i.e. small devices that enable the customer to view the codes instead of using mobile phones). This device complements the mobile phone message, in case the latter

is not working due to being abroad, for example.

*“We are the first bank to use an authentication device, a cipher token. This device enables the customer to receive an authentication code after completing transactions. This device enables the customer to move freely even if he/she is unable to get mobile service, as this device works anywhere in the world. I mean to say this device is a surrogate to the mobile as a tool to receive authentication codes.” MB12*

In summary, analysing managers’ comments during interviews revealed themes and categories; most were involved in facilitating services that are designed to create value for their customers. The strongest themes were concerned with *problem-solving, customers’ needs, building strong relationships, service environment, service availability and convenience and widening customers’ knowledge and improving their skills*. In the next section, the interviews with customers are analysed and examined to identify how managers’ perceptions fit with customers’ experiences, and thereby to propose the key elements of the co-creation of value.

#### **4.5.2 Customers’ responses**

Customers banking experiences were ascertained by asking them to describe their interaction experiences with their banks. Following a holistic approach of analysis, topics were first identified through customers’ description of what makes them feel better or worse off when banking. The topics were also found to be concerned with value created from their interaction with banks online and offline. When describing their experiences, customers narrated several stories highlighting either the creation or destruction of value. Several situations in which customers collaborate with banks to create value were also emphasised. After identifying several topics, codes were then clustered into a meaningful structure to generate themes. The findings of this part of analysis revealed several themes that much of customers’ discussion focused on, such as *service availability and convenience, problem-solving, security measures, relationship*

*development, and consistency.*

This part of the analysis was concerned with emerging themes from the customer data. Table 4.5 displays these 12 themes that emerged, beginning with the most frequent ones:

**Table 4.5: Themes and topics resulting from content analysis of interviews with customers**

Themes/Categories	Frequency	Number of customers	Percentage of all
<b>1 Service Availability/convenience</b> (temporal value)	68	16	88%
<b>2 Problem-solving</b> (Proactive/responsiveness, complaints delivery)	66	14	77%
<b>3 Security measures</b>	60	6	33%
<b>4 Relationship development</b>	48	9	50%
<b>5 Consistency</b> (Internal consistency, consistency across channels, platform consistency, breadth of channel choice)	36	9	50%
<b>6 Cultural concerns</b> (Islamic products and services, branches for females)	25	6	33%
<b>7 Spatial value</b>	24	8	44%
<b>8 Functional value</b>	21	8	44%
<b>9 Knowledge and learning</b>	20	6	33%
<b>10 Communication</b> (Regular updates)	16	7	38%
<b>11 One-to-one experience</b> (Personalisation, customisation, customer recognition)	15	10	55%
<b>12 Decision making</b>	15	8	44%

#### **4.5.2.1 Service availability/convenience (*Temporal value*)**

Most of the customers (88%) discussed the benefits they perceived from using multichannel banking provided through their banks. Many customers value self-service technology-based channels, as these enable them to carry out their banking transactions *whenever it is convenient* for them. A male customer confirmed the benefits perceived from these services:

*“I am confident using online banking. With online banking I can also do it in my bedroom, in my home, at two o’clock in the morning, whenever it is convenient.” C11*

Many customers emphasised that the banks' working hours are normally synchronised with normal working hours, which prevents them from visiting physical branches if they work. The customers emphasised that via alternative channels they could overcome this problem. Another customer highlights this benefit:

*“I prefer to use the online service rather than using other channels to save time; the working hours for any employee, in any company, are the same as the bank's working hours. Because of this, using the online service allows me to do all my work by myself instead of wasting time.” C5*

#### **4.5.2.2 Problem-solving**

This theme represents the second most discussed theme by customers. Customers mentioned different incidents in which the bank was able to *identify their problems* and proactively provide solutions. A female customer explained a problem she faced with her credit card:

*“One of the valuable interactions with the bank was once when I was abroad and I did not realise that my card had expired. I was in a bad situation as I ran out of money and I could not use the card. I called the bank and I described the problem to them that I needed money, but the card had expired. They efficiently interacted with me to solve the problem as they extended the expiry date until I came back. I actually considered this one of my favourable experiences with the bank as it really saved me.” C7*

Confirming the previous idea that it is favourable when the bank is responsive to customers' problems, a customer describes a situation in which the bank interacted with his problem effectively:

*“Once I was in Dubai, I tried to withdraw money via the ATM card of bank ‘A’, which was my personal account. Unfortunately, the card was not working. I tried instead to withdraw my salary from my account in bank ‘B’, but my balance was zero. So I called bank B and I explained to them the situation of being outside the country without money. I explained to them that the card was*

*not working and the fact of having my salary transferred to their bank. So I asked them to deposit my salary before the due date. Actually, they did deposit the salary into my account as I requested immediately. Within two hours, I was informed that the process was completed.” C5*

Another similar incident was elaborated upon by a customer through the following excerpt:

*“One of the values I perceived from my interaction with the bank happened when I was outside the Kingdom and I was doing a transaction through the internet. To complete the transaction, I had to receive an authentication code on my mobile. But as I was abroad the registered mobile was not working, so I had to call the phone banking facility and explain my problem. Luckily, they agreed to make an exception for me where I could initiate the process without inserting a code.” C6*

Customers discussed their views that the banks facilitate different ways for them to express their problems and complaints. For example, a male customer demonstrated the importance of having *different ways to deliver complaints or suggestions* for service improvements:

*“I think it is important to have an option online to send my complaints, suggestions and so on. Customers’ attempts to improve the service through suggestions and recommendations have to be taken into consideration and to be dealt with positively, not just as routine procedures which are normally ignored..... Based on my knowledge, the online service of the bank I dealt with lacks this service and if I need to do so, there is just the traditional way of doing it such as written suggestions provided through branches.” C4*

Another customer represented a different point of view about delivering complaints and suggestions. He focused on the employee and was cynical about suggestions:

*“I didn’t think of complaining because I thought that the employee was trying to serve me as much as he could and if I complained I would hurt the employee*

*that was trying to help me. Normally in banks, customers' suggestions and recommendation are not taken into consideration. I will simplify it for you, usually when you want to kill a subject, present it to a committee. This is exactly what is happening with customer suggestions. We do not even know if committees are looking at them or not."* C5

#### **4.5.2.3 Security measures**

Although creating secure platforms is important, surprisingly, customers argued that security measures are very complicated. A customer with four different transaction experiences insisted that the degree of complexity of the security measures inhibited him from using the service again. His argument was about the number of attempts allowed to enter your password:

*"I would like to report on one of my experiences with the online service of one of my banks. The problem with this channel, which I always suffer from, is being very high in security. For example, if I made any mistake while entering the password it just gave me two attempts to re-enter the password again. Otherwise, it closes the account and this usually obliges me to visit the branch and be involved with long procedures to re-open the account again. Actually, this complication and high security prevented me from using the service again."* C2

Another customer agreed that *complicated security measures* sometimes adversely impacted the customer. This customer recalled his diverse experiences with online banking and its related security measures. He started with the cipher token device:

*"It is a battery powered device, if you press on the token, it will give you a long series of numbers that you actually have to either log in with or if you are doing any type of banking transactions, once you are logged in they will actually say ok, give us the numbers that are on the token and that number is unique and time based. The number is long, like maybe 12 characters or 16, you actually need to enter that number within 30 seconds as it changes every*

*30 seconds. So if you actually take too long to enter it, it will tell you it is the wrong token number.” C11*

He disputed that this matter might differ according to customer age or skills:

*“Now with me I can type it very fast, but what if I am an old guy like my dad. My dad also likes the online banking but the security measures have caused him too much frustration and he has high blood pressure.” C11*

The same customer compared online security between the Saudi banks and other international banks. His comparison was based on the level of encryption utilised by banks:

*“I have dealt with online banking with international banks; the login was very straight forward, as they used 128 encryption in the actual communication, if you go to their website it is a highly encrypted website. The problem with this is that it takes a long time to load on your screen. So the login is simple, but you have to wait a million years for the site to load.” C11*

Another customer disputed the usefulness of the security questions and how these questions could act as a hurdle in his continued use of the channels:

*“What really matters to me is the security measures in some banks are so complicated and sometimes it becomes boring starting with logging in, and in case of doing any mistake I have to repeat the process again, and some of them start asking the security questions which I normally hate and forget their answers.” C14*

#### **4.5.2.4 Relationship development**

Half of the customers expressed strong views about the *importance of having a good relationship* with the banks and its employees, but they gave *different views on why the relationship is important*. Some of them based their assumption on the importance of having good relationships with employees, which might facilitate their banking transactions. A male customer admitted that his previous

work experience in banking enabled him to have many bank employee friends, who normally assisted him to conduct his banking transactions with ease and prompt performance:

*“As I was an Assistant Manager and Information System Manager in bank A, I had many friends who normally tried to serve me immediately once I get to the branch.” C5*

Another customer agreed with this point of view:

*“I normally rely on my previous work experience with bank ‘A’, where I have old colleagues who facilitate and accelerate my transaction process.” C3*

A customer also agreed on the value of getting to know employees regarding facilitating transaction performance:

*“Unfortunately, the best way for the customer to be served well is having a good relationship with one of the employees.” C17*

Others argued that getting to know banking employees who were responsible for managing their accounts increased their sense of confidence and security. The following customer confirmed the previous customers’ views about the importance of relationship development regarding customer outcomes:

*“I don’t like to only use technologies, as I only use these for urgent transactions and security, but I like to feel that there are reliable people looking after my money securely and I like to communicate with people not only technology... I also like to visit the branch monthly to build a strong relationship with the employees and I also like them to help me carry out some transactions.... To be honest with you I am very happy and satisfied with my recent bank as I know someone there who is able to serve me well and to provide the best quality of service to me.” C13*

#### 4.5.2.5 System integration

Customers argued that *consistency across channels* is a critical factor in creating a successful experience. A group of customers discussed the importance of consistency between different channels' platforms, in particular, what they call 'platform consistency'. This finding was evident from the interviews with three customers respectively. A male computer engineer confirmed that *cohesive systems* are essential for creating favourable customer experiences.

*“Cohesive systems in the sense that the system that I look at is the same as what the customer service representative looks at, and the same as what the call centre guy looks at and the same as what the bank manager looks at. That I look at the system and that that guy looks at a different system and everybody is trying to coordinate because the platforms are different; that causes a headache for everyone.” C11*

Another male customer from Bank A agreed on the importance of having consistent systems and he explained his experience:

*“As for my experience with multichannel transactions, I don't feel that there is consistency between channels. For example, there is no link between phone banking and the text messages (SMS) which I receive on my cell phone. When I receive a message that says, “visit the nearest branch”, or “contact customer service”, and then I call customer service, I find that they have not got any idea about the text I have received. Thus, I have to explain the situation. It is assumed that in such a situation when I am asked to call the call centre, the employee should be aware of the case.” C4*

This customer also stressed that technology should facilitate this consistency:

*“Technology should facilitate this to happen; the employee should know the situation as soon as they log into my account through a message popping up onto his screen.” C4*

In addition to the previous argument, the customer considered that inconsistent channels were a problem that needed to be taken into consideration:

*“Sometimes as I said, I have to explain to them the situation again and sometimes they put me on hold or transfer me to another employee who has had no idea about the situation, so I have to repeat everything. I feel that there is a gap between the online services and phone banking. From my point of view, repeating the story to each employee and keeping me on hold is a problem as it wastes my time. I think the solution is to keep me talking to the same employee till the end, even if I have to call again. Once, they kept transferring me from one employee to the other until eventually the line automatically cut off.” C4*

Thus, the previous discussion suggests that consistency across channels relates positively to customers’ value outcomes, which will be discussed in detail later.

#### **4.5.2.6 Customers cultural concerns**

Customers exhibited a strong belief in the *value of having Islamic banking* instead of traditional banking. The perceived value of dealing with Islamic products is of spiritual value resulting from adherence to Islamic rules. Advocates of this view believe that taking Islamic principles into consideration in banking, which means no usury or interest, will lead to a successful banking environment. A customer of Bank B believed that the recent economic crisis is a result of usury transactions:

*“Unfortunately, banks in the Middle East ignore the risks associated with usury transactions. Dubai, for instance, faced the same problem before, because of its expansion in following this approach. Lebanon faced the same problem and I mean misusing usury transactions lead to bankruptcy and eventually a financial crisis.” C3*

Another customer from Bank A also shares the same view:

*“Today, after the financial crisis, requesting Islamic products has increased and banks should take this into consideration.” C10*

Customers expressed strong views on the efficiency of the Islamic banking, as the following excerpt demonstrates:

*“Banks should not deal with interest because its consequences are severe and western countries which invented this have suffered a lot from it. As a customer, to avoid this problem, I used to pay my credit card premium on time, so I am not involved in usury. In the case of a loan, if I know that there is usury, I refuse the product.” C3*

A customer from Bank A also confirmed the value of having Islamic products:

*“The most important value that the bank is providing now is the Islamic products. To be honest with you, 10 years ago I was not concerned with them, but today Islamic products are a privilege.” C10*

The same customer continues the discussion by focusing on critical issues regarding Islamic products. He emphasises that Islamic banking in Saudi Arabia is in its infancy, as there are no clear rules and policies that control it. The following excerpt explains his views:

*“There is no certain rule to protect customers if they are using Islamic products. There is no consensus between Shariah leaders on the Islamic products, whereas in Malaysia for example, they have a specific Shariah committee, which is responsible for imposing Islamic rules and guaranteeing customers’ rights. The Shariah system has to be unified in terms of Islamic products usages, rules, terms and conditions and so on.” C10*

#### 4.5.2.7 Spatial/location value

This theme appeared to be of great importance to customers. It represents *the importance of customer location* for interactions. In particular, customers need to have the same quality of service wherever they are. Eight customers out of 18 noted that they value the bank's ability to provide the service to them anywhere. This factor is also concerned with the extent to which the bank takes the customers' location into consideration when the service occurs. A businessman from Bank A explains an incident which was related to his location:

*“Once I called the call centre asking them to guide me in finding a working ATM machine, as I had tried several out-of-order ones.... I was astonished actually, so I asked the employee directly to give me his supervisor and he did; I talked with him, he apologised and gave me a prompt answer, and he described the places of the working ATMs near my location. After I reported my complaint, the supervisor promised that the employee's rude behaviour would be dealt with. The following day, they called again apologising for the second time and asking me if I was satisfied with the resolution, and actually I felt better after that and was more satisfied.” C18*

A group of customers valued their ability to carry out their transactions wherever they were; the following excerpt demonstrates this view:

*“I usually conduct most of my transactions through online banking, especially when I am outside the country, whereas when I get back home, I prefer dealing with branches where I can interact face-to-face with the employees.” C10*

An affluent customer expressed his views on the value of interacting with the bank:

*“I am an affluent customer so we usually have distinctive services such as being serviced in a special place inside the branch, so we don't need to queue, and thus we don't need to wait for long time.” C8*

From the previous discussion, providing customers with a variety of channels, regardless of their spatial location, is of great importance to them, and hence it maximises value.

#### **4.5.2.8 Functional/process value**

While spatial value is concerned with the importance of the location where the service occurs, functional value represents how *the process of the service interaction occurs*. Regarding this, customers described several ways in which they process their transactions in an efficient way. A customer of Bank B, a businessman, described the ability to print out a hard copy of each transaction as one of the benefits of interacting with channels to create more value:

*“One of the values perceived is the ability to obtain a copy of my transactions, which I can easily save on my laptop or print out and keep for my own records.” C14*

Another customer emphasises the importance of being able to view all the transactions in his account, and stresses the importance of this benefit as an outcome of the service interaction:

*“...The bank works on organising and managing the transactions in my personal account, which enables me to preview my account easily and know the average of my expenses. With these facilities, I can better financially plan my savings and so on. By knowing how much I paid for each commitment, I can easily know my average monthly expenses. Recently, I discovered that there are software programs, which can assist you in managing your financial transactions. I normally download my banking transaction data on to the program and it can easily manage my personal expenses and classifies them into categories. By using this software I can easily identify my monthly expenses; for example, how much did I pay for my car, my children’s school, etc...” C3*

#### 4.5.2.9 Knowledge and learning

Throughout this section, interviewees emphasised *the importance of being knowledgeable* and on *acquiring certain skills* to be able to access the bank's resources more efficiently. Customer interviewees reported a variety of scenarios regarding this, and a range of sub-themes emerged. One of the most important sub-themes was customer's perception of *the role that the bank plays to improve their knowledge and learning*. Interviewees highlighted that customer-employee relationships are critical in terms of assisting them in using different channels. A female customer explained a negative experience in which she asked for assistance to use the online channel:

*“When I first wanted to buy and sell shares using online banking, I asked one of the employees to help me with how to use the online banking and how to create an account so I can buy and sell through it. But she wasn't helpful at all, she just provided me with a computer and said now you can create an account yourself, although what I wanted from her was to show me how to do that step-by-step and to show me how to buy and sell shares online. Actually the employee was not qualified to deal with me and to teach me how to use the channel.” C13*

Another scenario was reported by customers, which emphasised customers' willingness and ability to utilise the bank's resources in terms of looking for information by accessing the bank's library found on their website. This experience is a positive one reported by a male customer:

*“This library is accessible through online banking; it always provides a free market research, which as an academic, can provide me with great value. This bank provides these resources to its customers for free. You can also find these resources in both languages, Arabic and English. Their free library is very valuable and they keep it updated. What is of great value regarding their library resources, is that they are written in a very simple way that every customer can understand, whereas the resources provided via other banks' libraries are very complicated and are simply directed to econometrics’*

*audiences rather than normal ones.” C10*

#### **4.5.2.10 Communication**

Within this category, customers emphasised the importance of being widely aware and *knowledgeable about new changes* suddenly occurring or planned to be applied by the bank. Informing the customer of new occurrences or updates was discussed by the customers in terms of changes in product policies, terms and conditions, or failure in their systems. A customer of Bank A emphasised the importance of online banking as it allowed him to follow up new offers, products and services:

*“Unfortunately, banks did not update their customers, even affluent ones, about their update of terms and conditions.” C5*

The customer gave an example of one of his experiences in which a change in a product policy was undertaken and he was not informed:

*“Actually, the bank did not tell us about what had changed in their products’ policies, in case we wanted to cancel the product or continue it; I have to look for this information by myself through the online service. I think one of the banks’ policies is their ability to change the conditions and policies of the product without referring back to the customer. From my point of view, I think one of our rights as customers is at least to be informed of changes.” C5*

Another male customer claimed that banks should inform their customers when they carry out system maintenance. The following excerpt expressed this point of view:

*“Sudden unavailability of service is like, for example, when I expect that online services are definitely working during the day. It is acceptable that the service is not working at night for maintenance, but if anything happens during the daytime they should send an e-mail to let us know because I need to trust that the service is there because I do my banking at my convenience, not*

*at the bank's convenience.” C11*

#### **4.5.2.11 One-to-one experience**

Under this theme three main categories emerged as important factors to *create individualised experiences*, and hence to co-create value. These dimensions also appeared as a result of understanding customers' needs and wants. Through understanding customers' needs, as discussed before, the banks are able to provide customised and personalised services. According to the banks customised products are the ones in which the bank enables the customer to amend the products and/or services' features to his/her desire within the banks policies, whereas personalised services are services provided to customers upon their request or providing exceptions to customers' urgent needs. In addition, while talking about different individualised experiences, customers affirmed that banks are taking corrective actions. An affluent customer of Bank A presented his view of being satisfied with his bank's services, which provide what he wants:

*“Another thing which I appreciate the most is the fact that the bank most of the time is responsive to my needs and requests. For instance, I once asked them to customise a chequebook for my business. I particularly asked them to add the logo of my organisation onto the chequebook with special page numbers as well. I also asked them once to issue a subsidiary credit card for my family members by writing a request with their names, and it was easily done.” C14*

In particular, customers reported several incidents in which the bank modified a service, taking into consideration customers' urgent requests such as international travel situations. Another customer from Bank A confirmed the bank's excellent responsiveness to customers' requests. As mentioned before, he reported a difficulty using the cipher token when conducting shares transactions, so he asked the bank to allow him to use the phone “hotline” service:

*“This incident matters to me as I am currently living abroad, so I asked the bank to allow me to use their hotline which is a direct phone line through which I can call them at any time asking them to conduct my share*

*transactions easily and efficiently. Of course this service is not given to any customer, but being an affluent customer, who has many profiles and mutual funds, the bank enabled me to use this service free of charge.” C10*

The previous discussion emphasised the benefits perceived by customers when they are given the opportunity to personalise or customise their service experience.

#### **4.5.2.12 Decision making**

When asked about the decision-making approach in the banking sector, *interviewees expressed different views*. The first group of interviewees confirmed that the bank provides all possible ways of assistance to help them make the right decision. The second group claimed that they did not need the bank’s assistance in making their decisions, as they normally knew what they wanted. Four of the customers relied on their previous banking employment experience in making their financial decisions. A customer of Bank A, a previous marketing manager in the banking sector, ensured his independence when he aimed to be involved with new banking products:

*“I have never relied on the banks to help in making decisions, and usually, I refer back to my experience, as I was one of the marketing managers in one of the banks for 10 years, and this gave me adequate knowledge to better understand banking products, which made me eliminate the bank in my decision-making process.” C18*

Another customer supports the same viewpoint:

*“In making decisions, I normally utilise my own previous knowledge about the banking industry, as I have previous work experience at banks.” C10*

In summary, the previous discussion reveals a variety of different customer experiences relating to their interactions with their banks. Different ways of facilitating value creation were also emphasised. In addition, customers

explained how the bank can create more value for them and the perceived value of using multichannel banking. Through their experiences, interviewees could explain different ways and situations in which they used the banks' different channels and resources to create more value. International travel situations were critical to customers and how the banks were responsive to their urgent needs.

## ***4.6 Discussion***

### **4.6.1 Comparison of managers' and customers' views**

Throughout this chapter, both managers' and customers' views have been considered in identifying opportunities for value co-creation. In this section, the themes are categorised based on the overlaps emerging from both views. Table 4.6 represents the joint interactive actions, which reflect customers' experiences in multichannel banking in Saudi Arabia. In particular, the themes and categories are the result of analysing both managers' perceptions and customers' views about co-creation experiences. In essence, the themes focused on situations where customers and the banks collaborated to create more value through their mutual interaction. The emerging themes and categories answer the overall question "What are the elements of the customers' co-creation experience?". Table 4.6 provides definitions emerging from the analysis and co-creation opportunities that are summarised from customers' comments and were evident in the analysis of managers' comments. Extracting these elements contributes to our understanding of what banks and customers do to enhance value co-creation.

**Table 4.6: Comparison of managers' and customers' views**

<b>Themes</b>	<b>Definition</b>	<b>Co-creation opportunities/ Practical application for managers</b>	<b>Co-creation opportunities/ Practical application for customers</b>
<b>Joint problem-solving</b>	The bank's willingness and ability to identify and solve customers' problems, and the degree of the customer's participation in this mutual process	<ul style="list-style-type: none"> <li>- E.g. identifying customers' financial problems and providing solutions to restructure their financial situation</li> <li>- Enabling the customer to track the progress of solving the problem</li> </ul>	<ul style="list-style-type: none"> <li>- E.g. delivering feedback on the quality of the bank's service via various channels</li> <li>- Monitoring the progress of their request</li> </ul>
<b>Joint relationship development</b>	The extent to which the bank, its employees and the customers are willing and able to build strong and mutual relationships	<ul style="list-style-type: none"> <li>- E.g. calling customers when they have not used services for a long time</li> <li>- Attending and responding to customers' invitations</li> <li>- Sending gifts to customers on occasions</li> </ul>	<ul style="list-style-type: none"> <li>- E.g. visiting the branch on a regular basis to get to know the employees and to strengthen the relationship</li> <li>- Willing to build a mutual relationship with the bank's employees</li> </ul>
<b>Joint knowledge and learning</b>	The extent to which the bank is able to increase customers' knowledge and improve their learning, and customers' willingness and ability to utilise multichannel banking to widen their knowledge and learning	<ul style="list-style-type: none"> <li>- E.g. updating customers in terms of new offers, services, system failures, system maintenance, new security measures, and new terms and conditions</li> <li>- Assigning an employee to teach customers how to use different channels more effectively</li> </ul>	<ul style="list-style-type: none"> <li>- E.g. accessing information on each channel to be updated about new offers, changes, etc.</li> <li>- Accessing information on each channel to learn how to use the channel</li> <li>- Interacting with bank employees to help customers use different channels more effectively</li> </ul>
<b>Consistency</b>	The extent to which the multichannel banking is a consistent system in terms of uniform platforms and unified	<ul style="list-style-type: none"> <li>- Providing a consistent banking system to support mutual interaction and hence co-create value that is flawless and efficient</li> </ul>	<ul style="list-style-type: none"> <li>- Co-create value-in-use by utilising services that are synergised, known and tracked across all channels</li> </ul>

	terms and policies across channels		
<b>Temporal value</b>	The extent to which multichannel banking enables the customer to use different channels that suit the customer's lifestyle and whenever its convenient	- Providing different banking channels that are available 24/7	- Accessing the banking channels whenever it is convenient to customers to maximise benefits
<b>Spatial/location value</b>	The extent to which multichannel banking enables the customer to use the channels, regardless of their location	- Providing different banking channels, available globally	- Accessing the banking channels wherever the customer is located at the time
<b>Cultural concerns</b>	The extent to which the bank is able to provide products and services that satisfy customers' religious and cultural concerns	- Providing customers with products and services that adhere to Islamic religion. E.g. facilitating charity contributions via a variety of banking channels	- Using the banking channels for charity contributions which support social and community responsibility.

The previous themes were discussed intensively by both groups and were identified as essentially contributing to the co-creation of value. To achieve the study's main objective of exploring customers' value co-creation experiences, three main themes were selected, because they appeared to represent the strongest possibilities for value co-creation. The three selected themes were established as elements of co-creation experiences and the *joint feature* is dominant across the three themes. The joint feature indicates that both firms and customers have roles and that they must collaborate to create more value. The themes, and their related dimensions, are now discussed in detail:

#### **4.6.1.1 Joint problem-solving**

As noted before, problem-solving was discussed in detail by both groups. The managers' viewpoint was to affirm their role as value facilitators in terms of establishing "different ways for customers to 'talk' and express the difficulties that they may have encountered while dealing with the bank". The managers' argument regarding problem-solving was focused mainly on the operational side of handling the problems. In particular, problem handling was a well-organised strategy in terms of unifying their efforts, tools and policies towards providing solutions in a shorter time. In line with establishing a special department for problem-handling, the banks invested in advanced technology and improved infrastructure to create a wide variety of channels for the customer to report their difficulties, concerns and suggestions. The banks intentionally differentiated between channels, to enable the customer to choose what suited their time and location. Whichever channel the customer chose to use, all queries followed a consolidated path to be solved.

As well as discussing problem-solving from the service provider's point of view, managers also expressed the importance of customers' involvement in the process. According to them, customers' involvement represents enabling the customer to be an active recipient of the service rather than a passive one. Accordingly, it is important to enable the customer to participate in the process by tracking the

progress of their enquiry, problem or complaint/suggestion; this way they are not ignorant about the progress of their enquiry.

The importance of the customer's active role was introduced through the transition from the firm-centric to the customer-centric approach, in which the customer becomes more informed, empowered and active (Prahalad & Ramaswamy, 2004). As mentioned in the literature review, the firms' role as value facilitators has been discussed by several scholars (Grönroos, 2009; Prahalad & Ramaswamy, 2004). The results confirm the findings in current literature on the role that the bank plays in co-creating value and creating a suitable environment for customers to create more value. Investing in advanced technology to facilitate the value proposition reinforces a recent finding from a study by Sandström et al. (2008). This described value proposition providers as physical enablers, which stand for any technical or physical facility (e.g. signs, symbols and infrastructure), to establish the service experience.

In contrast, customers' scenarios reported a variety of experiences where they faced problems and how the bank was able to solve them. According to the customers, the degree of the bank's competence in identifying customers' problems and providing solutions, enabled them to co-create more value. The bank being responsive to their problems or requests, no matter the time or place, was of great importance to customers in maximising benefits. Taking corrective actions followed by proactivity in checking the accuracy of the solutions were also important in providing customers with the sense that their problems were being taken care of; this created more value. Responsiveness and proactivity are common terms in literature on service quality (Zeithaml et al., 2002; Parasuraman et al., 2005). Responsiveness and proactivity also emerged as constituents of the customer experience quality scale by Lemke, Clark and Wilson (2011). As a consequence, *joint problem-solving* is proposed as a major dimension of customer co-creation experience and it is defined as follows:

The customer's perception of the bank's willingness and ability to identify and solve customers' problems, and the degree of customer participation in this mutual process.

#### **4.6.1.2 Joint-relationship development**

In the context of this study, banking in Saudi Arabia, relationship development was found to be an essential contributing factor to value creation for both groups. The concept of relationship is a construct of concern within the field of relationship marketing, service marketing and industrial marketing (Molina, Martin-Consuegra, & Esteban, 2007). Two decades ago, Berry (1983), followed by Hunt (1983), emphasised the importance of managing customer-firm interactions. Berry (1983) established a definition of relationship marketing as a planned strategy that focuses on attracting, maintaining and enhancing customer relationships. The strength of maintaining stable relationships with customers contributes immensely to firms' performance and profitability (Rajaobelina & Bergeron, 2009). The fact that banking and financial services are highly competitive, the strength of employees' customer relations are an intangible asset which cannot easily be copied by rivals (Wong, Hung, & Chow, 2007).

To create a distinctive service experience, financial advisors should concentrate on strengthening their relationships with their customers to create a competitive advantage; this leads to mutual value increase (Rajaobelina & Bergeron, 2009). Thus, findings of Study 1 confirmed the literature on the importance of building relationships with customers from the firm's perspective, and, perhaps more importantly, also from the customer's perspective. Several studies have demonstrated the benefits customers perceive from maintaining long-term relationships with a service provider (Bendapudi & Berry, 1997; Gwinner, Gremler, & Bitner, 1998). The analysis of the managers' interviews indicated the importance of building relationships with their customers and how this relationship influenced their success as managers as well as bank performance. The joint nature of this aspect is evident in the literature, whereby the firm's

intent and ability to support this relationship relies greatly on the employees' actions, whose capabilities and behaviours also influence the results from interactions with customers (Price & Arnould, 1999).

This study shows that building relationships is one of the factors that requires collaboration, thus resulting in value co-creation (between banks and their customers). According to managers, building strong relationships with customers can lead to their own career success, as it enables them to retain customers who are a valuable source of the bank's profitability. Relationship development from the firm's perspective is discussed in literature by Bolton, Lemon and Verhoef (2008). Similarly, customers' responses affirmed the importance of building a good relationship with the banks' employees. From the customers' point of view, the nature of the financial transactions sometimes required face-to-face encounters and having good relationships facilitates these transactions. This point of view has also been confirmed in literature, which shows that both financial institutions and customers emphasised the importance of human interactions (Lee, 2002). Finally, the significance of relationship development in creating a sense of confidence as to the safety of their wealth was also introduced by customers.

The results of comparing managers' and customers' views emphasised the importance of developing interpersonal relations between the parties involved. This is also confirmed in literature, which differentiates between inter-organisational and inter-personal relations, with the latter being the main focus of the qualitative results. In particular, inter-personal relations are associated with the significance of developing social bonds between interactionants (Iacobucci & Hibbard, 1999). The benefits of developing mutual relationships have been discussed in the personal selling literature, which emphasised that these relationships lead to mutual value exchange (Tam & Wong, 2001). Baker, Buttery and Richter-Buttery (1998) also claimed that the relationship building paradigm was established on interpersonal interaction with customers. A study by Reeves and Bednar (1996) emphasised that a sample of banking customers

stressed the importance of human interactions as essential to customers' satisfaction.

In the context of the present study, customers' preference of certain channels over others was service specific. Customers claimed that building good relationships through human interactions contributed to service performance in general and to certain services in particular, such as when encountering a problem or making a decision. Consequently, the present study contributes to literature through emphasising the importance of building strong relationships between bank employees and customers as a dimension of co-creation experiences. For this study, *joint relationship development* is defined as:

The extent to which the bank (i.e. employees) and the customers are willing and able to build strong and mutual relationships.

#### **4.6.1.3 Joint knowledge and learning**

The analysis of the managers' interviews revealed an important aspect of customer-bank interaction that appears to contribute to the co-creation experiences – *joint knowledge and learning*. The managers focused on the importance of their role in improving customers' skills so that they could make better use of the bank's products and services. They emphasised that the bank focuses on educating their customers about different channels. In branches, certain employees have the role of assisting customers in using the bank's resources. As discussed before, the managers also highlighted the importance of initiating campaigns and seminars oriented towards educating customers, and in turn, enabling the bank to increase its knowledge about customers' needs. Hence, value co-creation opportunities are facilitated. Payne et al. (2008) demonstrate that the more suppliers learn about their customers, the more co-creation opportunities arise, as the supplier improves the relationship experience and hence enhances co-creation.

Both managers and customers highlighted that communication was an essential way to enable customers to co-create value. The managers emphasised the importance of communicating with customers via multiple banking channels to increase their knowledge about new offers and recent changes. Moreover, customers also agreed upon the importance of being informed via different channels about recent changes and new offers and how these updates lead to co-creation opportunities. This confirms Payne et al.'s (2008) comments about the role that the firms must play to either enrich customers' competencies and capabilities related to their mission and values, or to enhance their abilities to utilise the available resources in an efficient and effective way. Thus, the third dimension of the value co-creation experience is joint knowledge and learning.

For this study, joint knowledge and learning improvement is defined as:

The extent to which the bank is able to increase customers' knowledge and improve their learning, and customers' willingness and ability to utilise multichannel banking to achieve this.

#### **4.6.1.4 System integration**

Comparing managers' and customers' views reveals an agreement on the importance of having a cohesive banking system which is able to combine different channels under one umbrella. Customer interviewees stressed the need to interact with consistent banking channels in terms of information content, service delivery and their past transaction records. Accordingly, when a customer places a request via one channel, it is of great value for them to be able to either follow this request or finalise it via an alternative channel. This finding confirms the ideas of channel integration represented by Sousa and Voss (2006), Bendoly, Blocher, Bretthauer, Krishnan, and Venkataramanan (2005) and Cassab and MacLachlan (2009) regarding service quality, risk aversion, and customer experience perspectives respectively.

Customers also appreciate being given the opportunity to choose between alternative channels to conduct their banking transactions. This finding is supports self-service technology literature discussed by Bitner, Brown and

Meuter (2000), who indicated that customers gain value from a choice of channels and are unsatisfied when restricted to limited channels. However, findings have also shown customers' resentment when conducting a transaction that requires more than one channel to be finalised. Interviewees expressed the importance of consistency in maintaining a history of customers' previous transactions, and how this contributes to value creation. This finding is also confirmed in a study by Cassab and MacLachlan (2009), who explored customers' views about multi-channel service quality. The study reported customers' frustrations when they were asked to repeat themselves at each transaction.

Furthermore, the managers also indicated that the banking channels need to be consistent in terms of customers' records. Managers emphasised that keeping records of customers' information through the use of technology enables the bank to provide tailored products and/or services. They also shed light on the usability of maintaining customers' records and the ability to be consistent when marketing new products and maximising profitability. This finding supports previous research on relationship marketing and the literature about customer-centric orientation. The main idea of this orientation is developing and maintaining long relationships with customers to improve the level of service provided and the level of customer satisfaction (Stefanou, Sarmaniotis, & Stafyla, 2003). This outcome can be achieved through the aid of sophisticated information technology systems which are called Customer Relationship Management (CRM) systems. In summary, system integration emerges as an important factor for both customers and managers, but it is not considered a mutual collaborative activity with respect to co-creation. Rather, it is the company's role and, for this study, it is considered part of 'integration quality' related to multi-channel banking.

#### **4.6.1.5 Temporal and spatial value**

Both groups of interviewees highlighted the perceived value related to the provision of multiple banking channels. Manager interviewees emphasised that

the bank facilitates delivering value to its customers by providing different channels for them to conduct their banking transactions. The value perceived in these facilities is that they enable customers to carry out their transactions at any time and from any location. In agreement with managers, customer interviewees emphasised the value perceived in having alternative channels for their banking transactions. Accordingly, the benefits perceived from their interaction with multichannel banking related to them saving time and effort; banking was at their convenience.

This finding supports previous research in services marketing, in particular conceptual and empirical studies, to measure convenience and related constructs. Several studies have examined the influence of service convenience, which reflects consumers' perceived time and effort when attempting to purchase or use a service (Seiders, Voss, Godfrey, & Grewal, 2007). The findings also support different streams of literature on service value, and selection criteria for banks. In a banking context, convenience factors are of great significance in terms of motivations to patronise banks in Bahrain and Singapore respectively (Almossawi, 2001; Gerrard & Cunningham, 2001). According to service value literature, one of the attempts to measure e-service value in a banking context is the typology of e-service value by Heinonen (2004). Based on the service quality literature, Heinonen (2004) extended the perceived service quality dimensions (technical and functional) by incorporating time and location dimensions to describe value perception. While temporal (convenience) and spatial (location) factors have emerged as important value contributors in a multichannel context, similarly to system integration, they are considered part of the provider's facilitation of value, not a co-creation process during service interactions.

#### **4.6.1.6 Cultural concerns**

Both groups emphasised the importance of considering the religious concerns of customers when operating financial services. As discussed earlier in this chapter, Islamic banking is a system that is concerned mainly with developing and

delivering financial products and/or services that comply with Islamic Shariah rules. Manager interviewees stressed customers' preference to use Islamic products and/or services, and how satisfying their needs in relation to their religious concerns, contributed to value creation. This finding is in agreement with Metawa and Almosawi (1998) and the findings of Naser, Jamal, and Al-Khatib (1999), which showed that the main motivating factor for customers to patronise Islamic banks in Bahrain and Jordan respectively, was their compliance to Islamic rules.

Customer interviewees strongly agreed on their preference to deal with a banking system which adhered to Islamic rules in terms of products and/or services, and even when operating their funds. Additionally, managers' interviews highlighted the importance of considering social responsibility (e.g. participating in orphanage day) and involvement in community support activities (e.g. giving donations). This finding is also in agreement with a study by Al-Khater and Naser (2003), who highlighted that religious individuals in Qatar prefer to invest their fund with institutions which pay Zakat (a basic pillar of Islam which aims to achieve social justice by collecting funds from the rich and giving them to the poor). Similarly, a study which examines customers' perceptions of the factors that impact on their selection of a bank, emphasised the importance of the bank's social responsibility (Dusuki & Abdullah, 2007).

As for time and location, religious and cultural concerns are not considered to be an element of the co-creation experience, but rather a dimension of value perceived by customers. To conclude, the four dimensions described by Heinonen (2004, 2006) were salient in the qualitative data of Study 1. Thus, Heinonen's typology (2004, 2006) will be extended in Study 2 by incorporating the religious value dimension perceived by customers in the context of banking in Saudi Arabia.

#### ***4.7 Managerial implications of Study 1***

The findings of the qualitative phase raised highly relevant questions for both management practice and research. First of all, by spotting different areas of interaction whereby value co-creation opportunities occur, managers can further understand the roles that customers are expected to play to co-create value. Understanding customers' participative roles enables managers to identify how their customers interact and respond to their services, and integrate their resources.

Among the most critical findings of the current study is the emergence of three main areas in which co-creation opportunities might occur: *joint problem-solving*, *joint relationship development* and *joint knowledge and learning*. Joint problem-solving is the most important of the three. When customers contact their bank seeking solutions to a problem, they are in an emergency situation and not seeking maximised benefits. Consequently, the bank should respond in a proactive way to solve the current problem and then use this interaction to co-create value. For instance, enabling the customers to track the progress of their problem or enquiry increases their contact opportunities with the bank, and then employees can work as part-time marketers to co-create more value.

*Joint relationship development* is classified under discretionary behaviours in which customers tend to collaborate to maximise value. Developing mutual relationships is achieved during face-to-face interactions which take place at physical branches. Bank employees should be well-trained to be able to understand customers' different personalities. If customers are willing to interact and develop relationships, bank employees should be able to carry on a dialogue and hence strengthen relationships. This area is very important as it overlaps with two other themes: *joint knowledge and learning* and *understanding customer needs*. As long as the employee can break the ice and encourage customers to talk, a relationship is established; in this situation, knowledge sharing and learning would be easier. The same applies to understanding customers' needs in order to facilitate customised and personalised services/products; a relationship between customer and employee should exist.

Findings from analysing the managers' interviews emphasised several ways in which banking managers can increase and maintain relationship building. For example, inviting a sample of their customers to attend a weekly tea party at the branch enables banks' employees to become more aware of their customer needs by listening attentively. Hence, the bank employees play an important role in relationship building. Managers should educate their employees, and train and improve their communication skills in order for them to be able to create new relationships and maintain established ones. Moreover, branch employees should show respect and care when dealing with customers at branches. Also, providing free drinks to customers while waiting to be served is highly appreciated by them, and it creates opportunities for both parties to engage with one another.

Another important area is increasing customers' knowledge and learning through interaction. The findings revealed several strategies banks could use to increase their customer's level of knowledge and learning; for example, they could initiate communication campaigns that enable customers to learn about the benefits of the banks' products and how to better use them to create value. Furthermore, providing the branches with screens which display new or current products, services and offers for customers to watch, is an indirect way of increasing their knowledge. Moreover, each new offer or product should be accompanied with new tools which help the customers to use the product and create more value. For instance, to advertise for home loans, links to real estate's websites must be added to the online service to encourage customers to carry out their searches via the bank website, and hence co-create value.

#### ***4.8 Limitations***

Similar to all research, the current study has its limitations. Undoubtedly, conducting interviews as the main data collection method yielded several limitations; for example, the bias of the interviewer is one of the main weaknesses. Reducing the data to a manageable form was also subjected to the researchers' subjective interpretation. Moreover, as the sample size was small,

interviewees of both groups do not represent the whole Saudi population. Another important limitation is related to the nature of value outcomes as being culturally influenced; findings might be impacted by the Saudi context. Given that the study was conducted in Saudi Arabia, a developing country and an advanced economy, with a highly religious, conservative and relationship-bound society, the findings might not be applicable to other countries where religion is not a feature and there are fewer social constraints. Limitations are discussed further in Chapter 7.

#### ***4.9 Implications for Study 2***

Throughout this section, a description of the implications of Study 1 for scale development is presented. In particular, this part presents a summary of the proposed dimensions for each of the key constructs based on the analysis and discussion of the qualitative data. The key dimensions described are based on the model the present project aimed to test. The proposed dimensions present a guide for developing the measures to be used in Study 2.

##### **4.9.1 Integration quality**

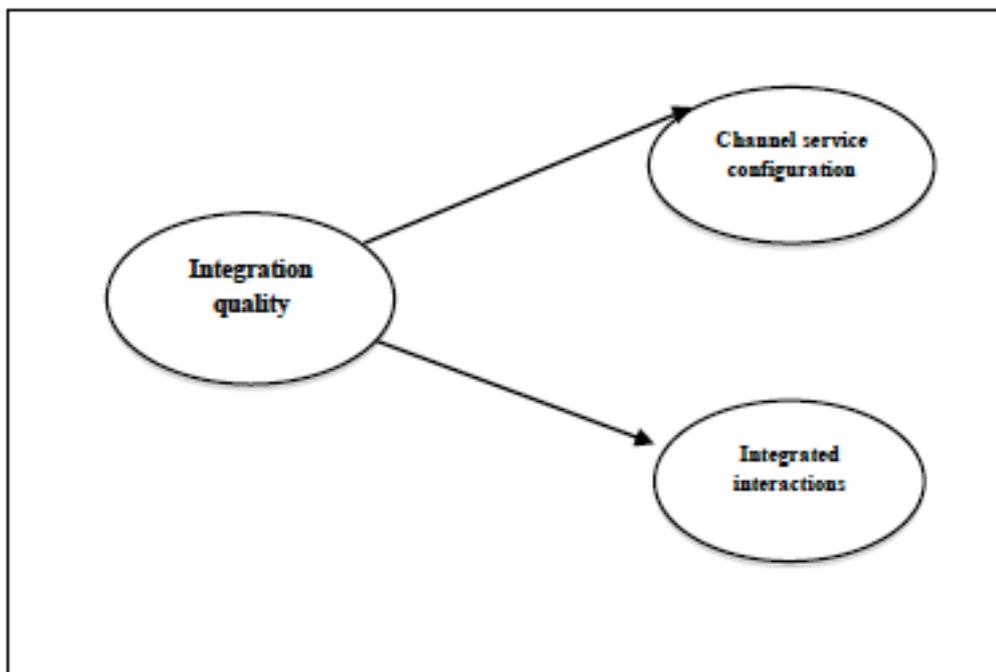
Based on the qualitative data analysis, the results revealed that banking customers highly appreciate using consistent banking systems in terms of internal, across-channels, and platform consistency and breadth of channel choice. The concept of consistency revealed in the analysis relates to the themes outlined by Sousa and Voss (2006); they proposed the concept of integration quality as “the ability to provide customers with a seamless service experience” (p. 365). Consequently, in the present study, the concept of consistency will be substituted by integration quality.

Building on Loiacono et al.’s (2001, as cited in Sousa & Voss, 2006) dimensions (complementarity of the web strategy with the overall business process) and (integrated communications through multiple channels), Sousa and Voss (2006)

extended these dimensions to a multichannel context by calling them channel service configuration and integrated interactions. Based on the previous discussion, it is proposed that, see Figure 4.1:

P1 Integration quality is composed of channel service configuration and integrated interactions

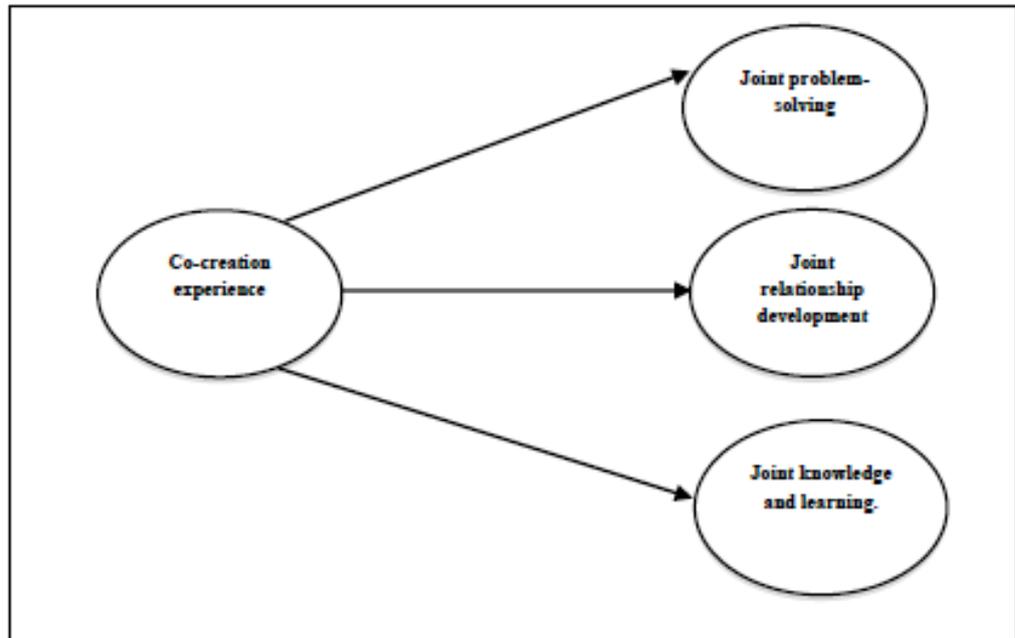
**Figure 4.1: Hypothesised model of integration quality**



#### **4.9.2 Co-creation experience**

Based on the qualitative data analysis, this construct is developed to represent possible opportunities of value co-creation in a multichannel banking context. The previous discussion and analysis of qualitative data revealed that co-creation of value, in a banking context, is reflected by three major dimensions that provide opportunities for customers to co-create value: joint problem-solving, joint relationship development, and joint knowledge and learning (displayed in Figure 4.2).

**Figure 4.2: Hypothesised model of co-creation experience in banking context**



#### **4.9.2.1 Joint problem-solving**

The *joint problem-solving* dimension measures customers' perceptions of the banks' willingness and ability to solve customers' problems, and customers' willingness and ability to participate in this process. Wolfinbarger and Gilly (2003) described problem handling as a representation of interest in solving problems, willingness of employees to assist and the ability to respond to enquiries. In an attempt to measure service quality in a multichannel context, Cassab and MacLachlan (2009) examined customers' assessment of multichannel quality of service through the providers' ability to handle customers' problems, and record with accuracy, scalability and usability. Based on the qualitative data analysis, the process of problem-solving represents the interaction between the bank and the customers in which co-creation opportunities take place.

This dimension, outlined in Table 4.6, represents the banks' role in facilitating customer value by being able and willing to solve problems and by being

responsive to customers' problems whenever the customer reports them, and the degree of customers' participation in this process. Thus, the first dimension of co-creation experience is joint problem-solving. This finding is in agreement with Kellog, Youngdahl, and Bowen (1997) and Broderick and Vachirapornpuk (2002), who found that customers tend to participate, intervene and be proactive when facing a problem or service failure. This participation might involve information exchange, complain delivery or feedback. Since no scale was found to measure customers' perception of *joint problem-solving* as defined above, a new scale was developed from Study 1, for use in Study 2.

#### **4.9.2.2 Joint relationship development**

This dimension measures customers' perception of the banks' employees', and the former's willingness and ability to build mutual relationships. Based on the analysis of qualitative data, the current study emphasises the interpersonal relationship development between customers and banking employees as the second dimension of the co-creation experience. The findings of Study 1 highlight managers' belief in the importance of customer-employee relationships to understand customers' needs and wants; this understanding leads to being able to provide individualised experiences, and thus co-create value. This result is confirmed in the literature, in that S-D logic supports a shift in marketing focus from designing relevant products to understanding the potential for co-creating relationship experiences (Payne et al., 2008). Moreover, customers, based on S-D logic, are "active players who can co-develop and personalise their relationships with suppliers and adopt a multitude of different roles" (Payne et al., 2008, p. 86).

According to Gremler and Brown (1998, as cited in Gremler & Gwinner, 2000), interpersonal relationships are composed of familiarity, care, friendship, rapport and trust. Gremler and Gwinner (2000) then examined the influence of rapport on customer-employee relationships and how this affected outcomes behaviours, namely loyalty, satisfaction and word of mouth communication. In two distinct

contexts, banking and dentistry, the study found that the two dimensions of rapport (enjoyable interaction and personal connection) had positive effects on outcome behaviours. Moreover, in the oriental culture, two decades ago, Tan and Chua (1986) disputed customers' preference for an intimate and close interaction with the bank personnel. Consequently, in the context of banking in Saudi Arabia, building mutual relationships appeared to be of great importance and the present study proposes *joint relationship development* as a second dimension of the co-creation experience. In the absence of a scale measuring customers' perception of the joint relationship development in a multichannel service in the literature, a new scale was developed in Study 1 to be tested in Study 2. In particular, the generated items reflected the ones used by Gremler and Gwinner (2000).

#### **4.9.2.3 Joint knowledge and learning**

The third proposed dimension that reflects co-creation experience is *joint knowledge and learning*. The concept of customer learning is not new to marketing literature, as it has been discussed in services management (Bitner, Faranda, Hubbert, & Zeithaml, 1997) and in relationship marketing literature (Hennig-Thurau, 2000). The process of improving customers' skills in relation to their post-purchase behaviours was discussed (Hennig-Thurau, 2000), and customer education and its relationship to customers' outcome behaviours was also discussed and empirically examined (Auh et al., 2007; Burton, 2002; Eisingerich & Bell, 2006, 2008). Hennig-Thurau (2000) emphasised the importance of a strategic communication of customer skills as a component of relationship marketing strategy, and whether this influences relationship quality and customer retention. Accordingly, customer skills were defined as "the total of all product related knowledge and skills of relevance to any aspect of the customer's post purchase behaviour" (Hennig-Thurau, 2000, p. 55).

A further attempt was made by Burton (2002) to emphasise the importance of consumer education as a powerful marketing strategy that impacts on service quality by deliberately distinguishing between information and education; she constructed an information-education continuum. This aids organisations in

deciding on the level of education that customers need, depending on the type and context of the given service. The study argued that information represents providing basic knowledge, whereas education provides a more advanced level of knowledge (Burton, 2002). Through arguing the difference between information and consumer education, Burton (2002) emphasised that consumer education provides consumers with the required skills to use information, instead of merely providing information without any further support. This type of education is of critical importance in the context of technical services (Burton, 2002).

Another intriguing stream of literature is the one that links customer education with their outcome behaviours (Bell & Eisingerich, 2007; Eisingerich & Bell, 2006, 2008). In a financial service industry, Eisingerich and Bell (2006) tested the link between customer loyalty and customer education, participation and problem management; customer education proved to be the strongest driver of customer loyalty. Eisingerich and Bell (2006) defined customer education as “service advisers’ willingness to explain financial concepts and the pros and cons of recommended investment opportunities to their clients” (p. 90). In a subsequent study, Eisingerich and Bell (2008) investigated whether investments in increasing customer service knowledge influenced customer trust and perceived service quality. The findings of this study confirmed the importance of customer education, in relation to their perceived service quality (i.e. technical and functional), in building trusting relationships with their organisations. Accordingly, customer education was viewed as “the extent to which service employees inform customers about service-related concepts and explain the pros and cons of service products they recommend to their customers” (p. 258). Reviewing the previous studies (Bell & Eisingerich, 2007; Eisingerich & Bell, 2006, 2008) indicates that customer education was defined based on Burton’s (2002) definition: the extent to which the service providers provide customers with skills and abilities to utilise information.

A plethora of theoretical studies based on S-D logic and services logic highlighted customer learning as an essential process in the customers’ value

creating process (Payne et al., 2008; Vargo & Lusch, 2004). This is attributed to the importance of customer education and their perceived value of learning, in helping them realise the full potential of purchased products; this enables them to identify and solve any problems that occur (Bell & Eisingerich, 2007), and hence to create more value. Customer resource integration refers to “the processes by which customers deploy their resources as they undertake bundles of activities that create value directly or that will facilitate subsequent consumption/use from which they derive value” (Hibbert, Winklhofer, & Temerak, 2012, p. 248).

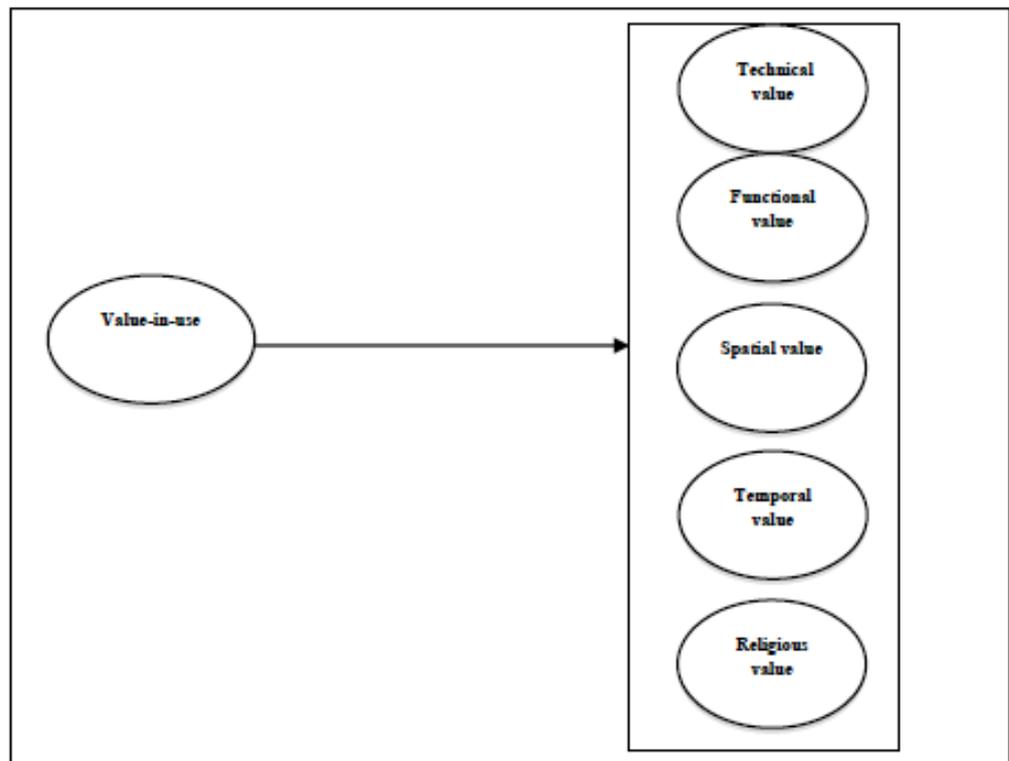
Employing customers’ resources is dependent on the firms’ role in facilitating and providing adequate knowledge and skills which in turn is perceived as customer learning. This view is in agreement with Normann (2001) who indicated that customer’s ability to create value is based on the amount of information, knowledge, skills and other operant resources that they can access and utilise. Findings of the qualitative Study 1 back up literature on the importance of customer learning facilitated through customer-bank interaction via multichannel banking to create value. Hence, the third dimension of customer co-creation experience is *joint knowledge and learning*. This refers to customers’ perceptions of the bank’s willingness and abilities to increase customer knowledge and improve their learning to better utilise the available banking resources; it also refers to the customers’ willingness and ability to then utilise multichannel banking to widen their knowledge and learning. Since no scale has been found in literature measuring customers’ perception of *joint knowledge and learning* as described above, a new scale was improved from Study 1 for Study 2. Thus, the following proposition is advanced:

P2 Co-creation experience is reflected by three factors; Joint problem-solving, joint relationship development, and joint knowledge and learning.

### 4.9.3 Value-in-use in multichannel banking

As defined in Chapter 2, value-in-use is customers' cognitive evaluation of the value generated during their use of resources and processes and their outcomes; usage can be physical, virtual, mental or a mere possession (adapted from Sandström et al., 2008; Grönroos & Voima, 2012). Based on e-service quality literature, Heinonen (2004) used technical and functional quality dimensions to measure service value. This is based on the conclusion that quality and value are linked, so that quality perceptions can be used to describe value perceptions. The analysis of the qualitative data from Study 1 revealed Heinonen's (2004, 2006) service value dimensions as being significant, as described by both groups (i.e. managers and customers). Consequently, the four-dimensional model of service value introduced by Heinonen (2004, 2006) will be extended and measured in Study 2. Thus, this study proposes that value-in-use in the multichannel banking context in Saudi Arabia is a function of five dimensions as displayed in Figure 4.3:

**Figure 4.3: Hypothesised model of value-in-use in banking in Saudi Arabia**



#### **4.9.3.1 Technical value**

The technical dimension is mainly concerned with technical elements of the service (Heinonen, 2004), and was traditionally described as the core service. In particular, it represents the outcomes of interaction with the service. The *ability to choose between alternatives* is one relevant aspect of this dimension (Heinonen, 2004). This is found relevant to the result of Study 1, as customers appreciated the ability to choose between alternative channels. Technical value contributes to value creation by supporting customers' activities and taking into consideration their specific needs. Technical benefits denote *content* (i.e. service design) and how it fits customers' needs. *Price* acts for monetary cost of using the service and cost efficiency (Heinonen, 2006) and indeed, price can be a benefit if the price is reasonable or cheaper compared to alternatives. *Tangibles* (i.e. the physical evidence of the service) and *reliability* (i.e. trustworthiness of the service provider) are the other benefits of technical value. Sacrifices are represented in having an overly customised service, the cost of using this service (depending on some tangible aspects of the service to be able to conduct it, e.g. identification numbers) and the risk of disclosing private information. The current study tests technical value as a dimension of value-in-use.

#### **4.9.3.2 Functional value**

While the technical dimension is related to the technical elements of the core service, functional value is related to the assessment of the functional aspects of the service delivery process (Heinonen, 2004). Specifically, the functional dimension is concerned with how the service interaction occurs. The functional dimension also denotes the customer-employee interaction. Functional value represents "customer perceptions of the process and how the service interaction occurs" (Heinonen, 2007). Specifically, this interaction involves all points of contact between the customer and the firm, both human and technical. The functional value perception is also found to be relevant to this study's qualitative findings, and represents customers' participation in their banking transactions that can be conducted via different channels.

Functional value contributes to value creation in terms of its many benefits and sacrifices. The first is the *easiness/functionality* of the process, while the sacrifice is that customers do not take the process seriously. The second benefit is *process support*, which represents support and assistance provided by the service providers to the self-service channels, and the sacrifice is *customers' dependability* on this facility (e.g. competence, service recovery or the inability to use the service) (Heinonen, 2006). Findings of Study 1 revealed that customers accentuate the importance of instant support when using self-service channels. In summary, the current study measures functional value as the second dimension of value-in-use.

#### **4.9.3.3 Temporal and spatial value**

Heinonen (2004) emphasises the significance of time and location as dimensions that have to be added to technical and functional dimensions to measure perceived service value. *Temporal flexibility* (i.e. temporal latitude) (Heinonen, 2007) represents customer's flexibility regarding the service and its temporal access (Heinonen, 2006, 2007) (i.e. convenient opening hours, flexibility to select preferred time for service delivery, and the benefit of spontaneity and immediacy). These benefits appeared to be of great importance to customers when using multichannel banking. The findings of Study 1 also indicate that customers expressed these benefits by discussing the convenience of using alternative channels and how this enabled them to create more value and to satisfy their needs and desires. They emphasised the importance of being able to carry out their financial banking transactions "at their convenience, not at the bank's convenience" (C11). Customers also stressed the significance of being able to access the service 24 hours a day for transactions when they were at home or at work: "*With these channels I am able to do my transactions whenever I want and the service is not limited to the bank working hours*" (C4).

*Time optimisation*, which refers to the efficiency of time allocation (e.g. automatically saving details for routine transactions decreases the time spent on a

service) (Heinonen, 2006, 2007), was found to be relevant to the analysed data in terms of saving customers' time and effort. A customer also pointed out that this facility decreased the likelihood of making mistakes when conducting routine transactions. The majority of customers emphasised the importance of alternative channels such as online banking and mobile banking in saving their time and effort, as discussed earlier. Thus, in the present study, the *availability and convenience* themes will be substituted with *temporal value*.

Spatial benefit implies *spatial flexibility*, *spatial convenience*, and *perceived functionality of service location* (Heinonen, 2006). Spatial flexibility, called spatial latitude in a subsequent study, represents spatial approachability to the service. It denotes the ability to select the service location to conduct a service (Heinonen, 2007). This benefit affirmed the findings of the qualitative study, which indicated that customers' appreciate the ability to conduct their banking transactions wherever they are. *Spatial convenience* refers to the "perceived functionality of elements in the service location that support a flexible service location" (Heinonen, 2006, p.389). Private space denotes the suitability of the service location (Heinonen, 2006). Spatial sacrifice represents restrictions in accessing the service location and perceived effort and distance related to the service location (Heinonen, 2006). Consequently, temporal value and spatial value are among the dimensions representing value-in-use.

#### **4.9.3.4 Religious value**

This dimension was found to be of great significance to banking customers in Saudi Arabia. Findings of the qualitative study indicate the importance of considering religious concerns in financial products and services. Based on the data analysis, the religious value dimension is defined in the current study as "customers' perceptions of their banks' ability to consider their religion in their financial transactions" (developed for this study). Based on the previous discussion, the following proposition is assumed:

P3 Value-in-use is reflected by five dimensions: technical value, functional value, temporal value, spatial value and religious value.

#### ***4.10 The conceptual model of Study 2***

Confirming the dimensions of the key constructs in the study have enabled the development of a theory related to the key constructs of integration quality, co-creation experience and value-in-use, with the addition of the outcome variable, commitment. The discussion in this section has enabled the construction of the full conceptual model, displayed in Figure 4.4.

Given the importance of providing customers with coordinated channels for a given service (Neslin, et al., 2006; Neslin & Shankar, 2009), the current study proposes that integration quality plays a significant role in co-creation experiences in multichannel banking. Accordingly, this study empirically tests the influence of integration quality as an antecedent to the customer co-creation experience. Hence, the first hypothesis is:

H1 Integration quality relates positively to co-creation experiences

Based on the analysis of the qualitative study and previous discussions, integration quality, which refers to the theme of consistency, was also found to be critical to service value. These findings both support and build on the extant literature that finds the value of a service product is largely defined by perceptions of quality (Cronin, Brady, & Hult, 2000).

A plethora of existing literature confirms the importance of service quality as a driver of customers' perceived value, demonstrated through the quality-value-loyalty chain (Parasuraman & Grewal, 2000; Gallarza & Saura, 2006), and of customer commitment (Dean, 2007). Furthermore, the extant literature revealed the impact of channel integration on customer outcome behaviours (e.g. loyalty,

trust and commitment), hence there should be a direct link between the two (Bendoly et al., 2005; Montoya-Weiss, Voss, & Grewal, 2003; Sousa & Voss, 2006).

However, little empirical research investigates the impact of integration quality, as a part of multichannel service quality, on customers' perceptions of the value in using multichannel banking and their responses (i.e. commitment). Hence, the current study also proposes to test these links:

H2 Integration quality relates positively to value-in-use dimensions

H3 Integration quality relates positively to commitment dimensions

Further, based on the data analysis of Study 1, the theory suggests that customers' participation in joint activities with banks influences customers' perception of value-in-use. This proposition is in agreement with an empirical study about co-creating service recovery, which emphasised that customer participation in service recovery is more likely to increase role clarity, perceived value in future co-creation, satisfaction with service experience and intention to co-create in the future (Dong et al., 2008). In addition, the literature on customer participation in service delivery has also focused on its influence on customers' perception of value-in-use (Henonien, 2009). Hence, the following hypothesis is assumed:

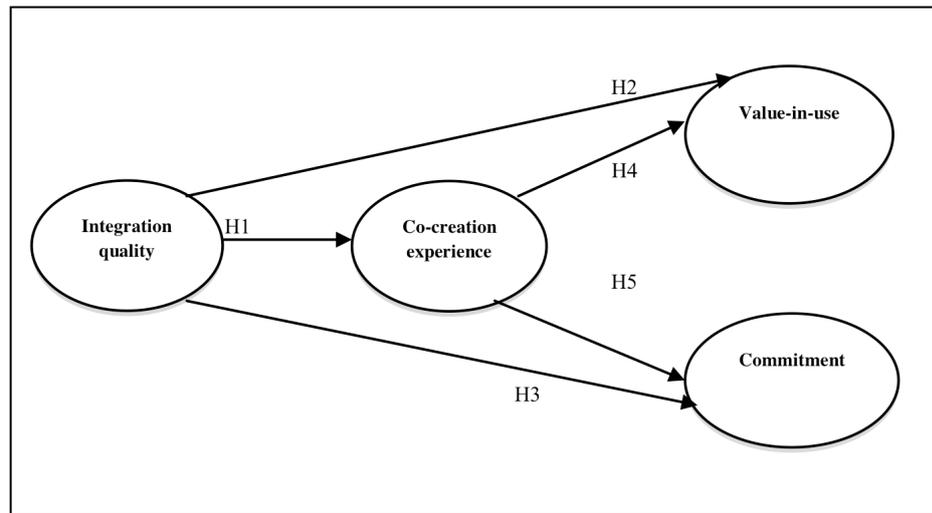
H4 Customer co-creation experience relates positively to value-in-use

As indicated previously in Chapter 1, the current literature emphasised the likely importance of the relationship between customer value co-creation experiences and customer outcomes (Jaworski & Kohli, 2006; Ostrom, et al., 2010). Thus, it is hypothesised that:

H5 Customer co-creation experience relates positively to commitment

Figure 4.4 displays the relationships for testing in Study 2.

**Figure 4.4: Full conceptual model**



#### ***4.11 Conclusion to chapter 4***

The current chapter presents the results of Study 1 (qualitative phase). Each group of interviewees was separately analysed to achieve the main objectives of the study. Analysing the manager group revealed different approaches to value facilitation assumed to be critical to creating distinguished service experiences, and hence creating value for customers. Additionally, analysing the group of customers also revealed a variety of ways in which customers integrated different banking channels to create more value. Since the main objective is exploring what value co-creation means for both groups, comparing both views was attempted to achieve this goal.

Given that the basic aims of Study 1 were to understand the banks' role in facilitating and supporting value co-creation, and the meaning of value co-creation from customers' own words, the findings of this study assist in our understanding of the elements of customer co-creation experiences in multichannel banking. Specifically, findings assist in understanding the role of customers as active participants in co-creating value, and their perceived value in using multichannel banking. Adopting the qualitative approach, Study 1 aimed at providing a deeper understanding of the key constructs used to develop scale items and the conceptual model for Study 2. An implication of this is testing the hypotheses and testing proposed relationships between constructs displayed in the conceptual model in Figure 4.4. The next chapter discusses Study 2 and how testing and validating measurements were conducted.

## **Chapter 5 : Testing and validating measurements**

### ***5.1 Introduction***

The current chapter discusses in detail the quantitative phase of the thesis (Study 2). As indicated previously, the major objectives underlying Study 2 were: firstly, to test and validate the measurements developed from Study 1, and secondly, to test the hypotheses and the proposed relationships between the major constructs of the study. Throughout this chapter a thorough description of the sample, response rate and preliminary statistical analysis is explained. Exploratory Factor Analysis (EFA) followed by Confirmatory Factor Analysis (CFA) were used to conduct the first phase of analysis which will be described in detail throughout this chapter. In addition, testing and validating the new measures are explained in detail.

### ***5.2 Overall research design (Study 2)***

Given Study 2 is the quantitative phase of the current thesis, which aimed at testing hypotheses and drawing conclusions about population, the use of a survey method was justified. Since the study's major concern was about customers' perception of their multichannel banking experience, a survey was carried out at one point time on a sample of current banking customers.

#### **5.2.1 Response rate and sample description**

Respondents of Study 2 were current banking customers over 18 years old and were recruited from five major banks in Saudi Arabia. A total of 1400 questionnaires were distributed to respondents in a total of 11 branches of the 5 banks used in the study. 579 out of the 1,400 questionnaires were returned, of which 51 questionnaires were not useable. Total sample size was 528, yielding an effective response rate of 37%.

The sample was diverse in terms of customers' gender, age, level of education and income. Frequencies of these items will be reported in the following table 5.1:

**Table 5.1: Sample characteristics**

Variable	Criteria	Number	Percentage (%)
<b>Age</b>	18 to 24	81	15
	25 to 34	190	36
	35 to 44	142	27
	45 to 54	90	17
	55 and above	23	4
<b>Gender</b>	Male	247	47
	Female	257	49
<b>Education</b>	High school	65	12
	Undergraduate	89	17
	Graduate	289	55
	Postgraduate	80	15
<b>Monthly income (SAR) 1USD = 3.75 SAR</b>	1000-5000	127	24
	5001-10000	172	33
	10001-15000	156	30
	20001- above	56	11

Table 5.1 shows that approximately half of the sample was female (49%), and the rest were male (47%), however, the rest 4% was missing data. The sample was relatively young with 63% aged between 25 and 44 years. The majority (70%) were university educated and medium income earners. However, the graduate percentage was higher than expected, over 50% which indicates that the sample is not totally representative of the population in Saudi Arabia.

### ***5.3 Missing data***

Since missing values are a hurdle facing many researchers, a variety of approaches to deal with them are found in literature. Evaluating the extent and pattern of missing data are a must to determine whether the extent of missing data warrants further attention. In the current study, data entry for the full sample was completed and then comprehensively checked to ensure the accuracy of entering values into the SPSS program. In addition, maximum and minimum values for

all items were determined and no apparent discrepancies were evident.

According to Hair et al. (2010), missing data under 10% for an individual case or observation can be ignored, while Tabachnick and Fidell (2007) assert that 5% or less missing randomly is acceptable. Missing data in the present study for individual variables range from 0.2 to 1.7% and thus below the limits recommended. As researchers always aim at obtaining a complete set of data, the current study substitutes the missing data with the ‘mode’ (i.e. the value that occurs most frequently in the data set) (Donders, Geert, Heijden, Stijnend, & Moons, 2006).

## ***5.4 Method of analysis***

### **5.4.1 Development of measures: Factor analysis**

Analysis of the collected data of Study 2 will be conducted via two main stages: firstly, Exploratory Factor Analysis (EFA) will be employed to study major constructs, and secondly, Confirmatory Factor Analysis (CFA) using Structural Equation Modelling (SEM) is used to test the proposed measurement model. Table 5.2 (below) displays the criteria to be met to interpret the results:

**Table 5.2: Criteria followed when conducting preliminary analyses**

Stage	Criteria adopted	Source
<b>Exploratory factor analysis</b>		
Preliminaries	Having between 5 & 10 participants per variable Having a sample size up to or greater than 300 Use two multi-item measures together, not single measures Use principal components analysis (unity diagonals) if 20 or more variables Use varimax rotation	Tinsley and Tinsley (1987) Tabachnick and Fidell (2007) Hinkin (1995)  Nunnally and Bernstein (1994) Hair, et al. (2010)
Output	Need eigenvalues > 1 and evidence from scree plot to rotate factors Need factor loadings > 0.32  Double loading when >0.4 on two factors (therefore dropped)	Tinsley and Tinsley (1987) Tabachnick and Fidell (2007) Field(2009)
<b>Reliability checks</b>		
Scale	Alpha value > 0.80 adequate	Nunnally and Bernstein (1994)
Item	Item-to-total <0.30, item dropped 'Alpha-if-item deleted' used to check for potential scale improvement	De Vaus (1990) De Vaus (1990)
Normality of data	Skewness and kurtosis < 1.96	Hair et al. (2010)
Multicollinearity	Intercorrelation >0.70 first indicator of problem Tol < 0.60 unacceptable VIF <10	Tabachnick and Fidell (2007)

*Note.* Tol = Tolerance; VIF = Variance Inflation Factor.

#### **5.4.1.1 Exploratory Factor Analysis**

Since the main objective of Study 2 was refining constructs by checking dimensionality of scales and determining factor structure, the use of EFA was justified. Accordingly, EFA is considered a practical method for scale development which is useful to reduce a large number of indicators to a more consistent set. In particular, it is used when there is no detailed theory guiding the relationships between the set of items and the underlying constructs (Gerbing & Anderson, 1988). Thus, EFA is used as a preliminary analysis to identify the underlying structure among a set of variables (Hair et al., 2010).

- **Factor analysis assumptions**

To conduct EFA, certain assumptions must not be violated. Firstly, the sample size must be 100 or larger with a ratio of 5 times observations per variable (Hair et al., 2010). Since the sample size of the study is (n=528), this assumption was met. Secondly, to confirm the appropriateness of factor analysis, a strong conceptual basis must ensure a structure exists among the variables analysed. Thirdly, a degree of intercorrelation between variables has to be ensured. This can be done by, (1) checking the correlation matrix to ensure substantial numbers of correlations are greater than 0.30, (2) examining Bartlett's test of sphericity to ensure statistical significance (sig. <0.05) and (3), having Measure of Sampling Adequacy (MSA) values exceeding 0.50 for the overall test and every single variable (Hair et al., 2010).

- **Factor extraction method**

Once the previous criteria were met, a method to extract factors had to be chosen. Two methods of extracting factors were used: common factor analysis and component analysis. While *common factor analysis* is used to extract the underlying factors which reflects what the variables share in common, *component analysis* (Principal Component Analysis) is used for prediction purposes by extracting a minimum number of factors which summarise the original variance (Hair et al., 2010). In the present study, PCA will be used to achieve data reduction and extract the minimum number of factors that accounted for the total variance among a set of variables (Hair et al., 2010).

- **Standards for number of extracted factors**

There is a variety of criteria researchers normally follow to reach the final number of extracted factors. In this study, the authors' (Hair et al., 2010) rules of thumb for factor extractions are used: (1) factors with eigenvalues > 1, (2) factors extracted must explain 60% or greater of the total variance, (3) factors before inflection point on scree test. In this study all three aspects were taken into consideration.

Factor rotation is used to simplify the factor structure. Two major types of rotation are an orthogonal factor rotation and an oblique factor rotation. *Orthogonal* rotation is mainly used when the objective is data reduction to a set of uncorrelated measures, whereas *oblique* is used when the factors are assumed to be correlated. As the former objective was important, varimax rotation was used.

- **Factor interpretation**

There is no definite way to interpret factors; it depends mainly on the conceptual foundation supporting the study and the researcher's experience (Hair et al., 2010). However, two main judgments have to be made when interpreting factor extractions: (1) *factor loadings* are the correlation of each variable and the factor (Hair et al., 2010). In particular, by interpreting factor loadings, the role that each variable plays in determining each factor is emphasised. Factor loadings must be greater than 0.50 to be considered significant, (2) variable's *communality* represents "the estimate of the variable's shared, or common, variance among the variables as represented by the derived factors" (Hair et al., 2010, p.105). Checking communalities enables the researcher to ensure that each variable has met an acceptable level of explanation. As a guideline, all variables' communalities must be greater than 0.50 to have sufficient explanation.

### ***5.5 Findings of Exploratory Factor Analysis (EFA)***

As recommended by Anderson and Gerbing (1988), a two-step modelling approach was utilised to analyse the unidimensionality of the constructs. EFA was first conducted to factor an overall set of items as a preliminary analysis towards scale construction. Then, CFA was also conducted on all constructs to refine the constructed scales.

A Principal Component Analysis (PCA) was used on all constructs – integration quality, co-creation experience (3 dimensions), value-in-use (3 dimensions) and commitment (3 dimensions) – with orthogonal rotation (varimax). The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis, and its values ranged from 0.787 to 0.914; all KMO values for individual items were values greater than 0.5. Bartlett tests of sphericity were also significant which indicated that correlations between items were sufficiently large for PCA.

Table 5.3 (below) displays findings of EFA in detail.

**Table 5.3: Findings of EFA**

Construct	Dimensions	EFA tests	The Kaiser-Meyer-Olkin	Bartlett test of sphericity	EFA findings
<b>Integration quality scale</b>	Channel service configuration	(PCA) with orthogonal rotation (varimax)	0.842	$\chi^2 (15) = 050.040, p < 0.001$	1 component, eigenvalue > 1, and explained 54.259 %.
	Integrated interaction				
<b>Co-creation experience scale</b>	Joint problem-solving (JPS)		0.914	$\chi^2 (91) = 6550.513, p < 0.001$	3 components, eigenvalue > 1 and explained 77.721% of the total variance.
	Joint relationship development (JRD)				
	Joint knowledge and learning (JKL)				
<b>Value-in-use scale</b>	Convenience value		0.883	$\chi^2 (55) = 2887.024, p < 0.001$	Two components with eigenvalues > 1 and only one is 0.977, and explained 69.781 of the total variance.
	Customer participation benefits				
	Religious value				
<b>Commitment</b>	Continuance commitment		0.787	$\chi^2 (21) = 1960.931, p < 0.001$	Two components with eigenvalues > 1 and explained 74.088% of the total variance.
	Normative commitment				

### 5.5.1 Integration quality

An initial analysis was conducted to obtain eigenvalues for each component in the data. Only one component had an eigenvalue over Kaiser's criterion of 1 and explained 54.259 % of the variance (see, Table 5.4). Hence, the two dimensions of interaction quality were not identified. Therefore, integration quality was assumed to be one dimensional.

**Table 5.4: Principal component analysis of items in integration quality scale**

Item	Factor loading(1)	Cronbach Alpha	Corrected item-to-total correlation
<b>Channel service configuration</b>		0.757	
1. My bank enables me to choose between alternative channels	0.723*		0.554
2. My bank enables me to accomplish my transactions by simply using one channel	0.615		0.439
3. My bank makes me aware of all channels and the services available	0.789		0.675
4. My bank makes me aware of the price implications	0.784		0.585
<b>Integrated interactions</b>		0.711	
5. I am confident that I can receive the same response to my query regardless of the channel I use	0.760		0.553
6. I am confident that the service provided to me through one channel takes into account my previous interactions through other channels	0.735*		0.553
Eigenvalue	3.256		
Percentage of variance	54.259 %		
<b>Joint reliability</b>	0.826		

\*Items deleted

### **5.5.2 Co-creation scale**

The construct co-creation experience is a function of three dimensions joint problem-solving (JPS), joint relationship development (JRD) and joint knowledge and learning (JKL). As discussed before, these three constructs were designed to question respondents in two ways: (1) items asking about banks' actions and (2) items which asked about customers' actions. Thus, three composite variables were created that averaged the answers of questions which reflect each other, from both sections. For example, the result of question one in the section, JPS (bank's actions), is added to the result of question one in section two (customer's actions) and divided by two. The result of these two answers is a new value of the first composite variable JPS, which is composed of 6 values. The same procedure was followed with other dimensions of JRD and JKL. A PCA was then conducted on the three composite variables, JPS (6 items), JRD (3 items) and JKL (5 items), to ensure conceptually related variables were differentiated. An initial analysis was conducted to obtain eigenvalues for each component in the data. Three components had an eigenvalue over Kaiser's criterion of 1, and in combination explained 77.721 % of the variance (see, Table 5.5) (below).

**Table 5.5: Co-creation experience scale**

Construct dimension	Shortened items (variables)	Factor loadings (1)	Factor loadings (2)	Factor loadings (3)
<b>Joint problem-solving</b>	B_PS1. My bank shows its willingness to cooperate with me to solve my problems+ C_PS1. I am willing to cooperate with my bank to solve my problems/2	0.826		
	B_PS2. My bank provides me with various channels to report my problems easily +C_PS2. I am able to report my problems easily via different channels/2	0.841		
	B_PS3. My bank confirms that my problem has been acknowledged +C_PS3.Whenever I report a problem, I can monitor the progress of my request/2	0.801		
	B_PS4. My bank provides solutions to my problems regardless of my location + C_PS4. I am prepared to take action to get my problems solved wherever I am./2	0.810		
	B_PS5. My bank responds promptly to my problems + C_PS5 I am prepared to take an action so that the bank can give me a prompt response to my problems/2	0.814		
	B_PS6. My bank provides various channels for me to deliver my feedback on the quality of the bank's service + C_PS6. I am willing to deliver my feedback on the quality of the bank's service/2	0.725		
<b>Joint knowledge and learning</b>	B_KL1. My bank provides information in each channel that teaches me how to use that channel+ C_KL6. I am willing to access information in each channel to learn how to use that channel	0.564*	0.476*	
	B_KL2. My bank assigns an employee to help me use different channels more effectively + C_KL7. I am prepared to interact with bank employees to help me to use different channels/2	0.474*	0.592*	
	B_KL3. My bank initiates seminars/workshops to increase my knowledge + C_KL8. I am prepared to accept my bank's invitations to attend seminars/workshops/2		0.839	
	B_KL4. My bank helps me to develop knowledge and skills so that I can access information... +C_KL9. I am prepared to develop my knowledge and skills so that I can access information/2		0.862	
	B_KL5. My bank, through different channels, keeps me updated + C_KL10. I use different channels to keep myself updated with changes/2		0.789	
<b>Joint relationship development</b>	B_RD1. Employees of my bank are willing to develop a personal relationship + C_RD1. I am willing to develop a personal relationship with the bank's employees/2			0.873
	B_RD2. Employees of my bank strongly care about me + C_RD2. I strongly care about the employees of my bank/2			0.888
	B_RD3. Employees of my bank seek to maintain a relationship with me + C_RD3. I am willing to maintain a relationship with the employees/2			0.840
	<b>Eigenvalues</b>	8.080	1.608	1.193
	<b>Percentage of variance</b>	34.389%	23.084%	20.248%
	<b>Individual reliability</b>	0.934	0.891 (after removing BKL1&2)	0.915

\*Items deleted

### **5.5.3 Value-in-use**

A principal component analysis (PCA) was also conducted on the 14 variables supposed to measure (value-in-use) with orthogonal rotation (varimax). Two factors with eigenvalues  $>1$ , and a third of 0.988, were extracted. The theoretical foundation and findings of the qualitative study suggested 5 factors, but after deleting three indicators, the analysis was forced to generate three factors. Items Temp\_V2, Spatial\_V2 and Func\_V1 cross loaded on two factors and so were removed from any further analysis. After removing the three items, 11 items were exposed to EFA again. The findings displayed 3 factors, two eigenvalues  $>1$  and one 0.977, which in combination explained 69.781 % of the variance (see, Table 5.6) (below). Total items loaded on three factors named religious value, customer participation benefits and convenience value.

**Table 5.6: Principal component analysis of items in value-in-use scale**

<b>Construct name</b>	<b>Shortened items (variables)</b>	<b>Factor loading (1)</b>	<b>Factor loading (2)</b>	<b>Factor loading (3)</b>
<b>Convenience value</b>	CV_1. I value being able to conduct my banking via alternative banking channels			0.816
	CV_2. I value using alternative banking channels as they enable me to do my banking whenever is convenient to me			0.876
	CV_3. Wherever it is convenient to me			0.789
<b>Customer participation benefits</b>	CPB_1. I value the bank sending confirmation messages to me after conducting my transactions		0.713	
	CPB_2. When seeking live interaction with the bank employees, I value the opportunity to use different channels (branch, phone, internet chat/email)		0.753	
	CPB_3. I value the ease of retrieving past transactions (e.g. hard or soft copies of statements)		0.790	
	CPB_4. Compared to transactions done by bank personnel, I value the opportunity to do transactions myself		0.655	
<b>Religious value</b>	Rel_V1. I value my bank more when it considers my religion in the way that it operates	0.844		
	Rel_V2. I value my bank more when it supports community and charity activities	0.771		
	Rel_V3. I value my bank more when it provides me with products that satisfy my religious concerns	0.738		
	Rel_V4. I value the opportunity that alternative channels provide for me to pay my charity contributions	0.715		
	<b>Eigenvalues</b>	5.263	1.436	0.977
	<b>Percentage of variance</b>	24.007	23.654	22.120
	<b>Reliability</b>	0.865	0.814	0.821

### 5.5.4 Commitment

An initial analysis was conducted via PCA. Two components with an eigenvalue higher than Kaiser's criterion of 1 were first extracted and, in combination, explained 74.088 % of the variance, as explained in Table 5.7. Items of 'normative commitment' (Norm\_Q3, Norm\_Q5, Norm\_Q6) cross loaded on two factors, and hence they were deleted from any further analysis. The final results are as follows:

**Table 5.7: Principal component analysis of items in commitment scale**

Construct name	Shortened items (variables)	Factor loading (1)	Factor loading (2)
<b>Affective commitment</b>	AC_1 I feel a strong sense of belonging		0.908
	AC_2 I would be very happy to spend the rest of my life as a customer of my bank		0.826
	AC_3 My bank has a great deal of personal meaning to me		0.812
<b>Continuance commitment</b>	CC_1 would be very hard for me to leave my bank right now, even if I wanted to	0.868	
	CC_2 I am afraid of what might happen if I end my relationship with my bank without having another bank lined up	0.794	
	CC_3 Staying with my bank is a matter of necessity to me	0.752	
	CC_4 My life would be disrupted if I decided to leave my bank right now	0.749*	0.452*
	<b>Eigenvalue</b>	3.510	1.676
	<b>Percentage of variance</b>	37.639%	36.449%
	<b>Reliability</b>	0.829	0.840

\*Items deleted

### 5.5.5 Summary of EFA analysis

Table 5.8 (below) displays the final decisions made, based on the findings of EFA.

**Table 5.8: Summary of EFA findings**

Construct name	EFA	Decision
<b>Integration quality</b>	One factor rather than two	Retain one factor
<b>Joint problem-solving (JPS)</b>	Loaded as expected on one factor	Retain one
<b>Joint relationship development (JRD)</b>	Loaded as expected on one factor	Retain one
<b>Joint knowledge and learning (JKL)</b>	Loaded as expected but two items cross loaded	Delete item JKL 1&2 and retain one factor
<b>Value-in-use</b>	Three factors not expected	Retain three factors
<b>Commitment</b>	Two factors not expected	Delete items (Norm_Q3, Norm_Q5, Norm_Q6 ) and retain two factors

## ***5.6 Confirmatory Factor Analysis (CFA)***

After conducting (EFA) to determine factor structure and to specify the number of factors existing for a set of variables, Confirmatory Factor Analysis (CFA) was conducted to test the measurement theory. Since applying EFA does not assist in providing sufficient and rigorous testing to the unidimensionality of the scales, CFA is employed on all constructs to overcome this issue. In particular, CFA presents a rigorous interpretation of the unidimensionality of the constructs, which is stronger than other methods (i.e. coefficient alpha, item-total correlations, EFA), leading one to draw significant conclusions about the viability of the scales (Gerbing & Anderson, 1988).

Moreover, the main objective of CFA is to measure the extent to which the proposed theoretical pattern of factor loadings on pre-specified constructs represent the collected data (Hair et al., 2010). Testing a measurement model indicates how measured variables logically and systematically represent the constructs involved in the conceptual model. In particular, a measurement model tests a sequence of relationships that represent the latent constructs using observed variables or indicators (i.e. scale items), and it is used to refine the resulting scales (Gerbing & Anderson, 1988).

To achieve CFA, the measurement model is visually represented by a diagram that is tested by Structural Equation Modelling (SEM). Since all measurements involved in the current study were theoretically based, testing measurement models were applied following stages suggested by Hair et al. (2010). To assess measurement model validity, two approaches were followed: (1) examining the Goodness of Fit (GOF) indices, (2) assessing the construct validity and reliability of the measurement models. Goodness-of-fit measures whether the specified measurement model reflects the actual data. Specifically, (GOF) examines whether the estimated covariance matrix, based on the theoretical measurement model, is similar to the observed covariance matrix which is estimated from the sample data (Hair et al., 2010; Reisinger & Mavondo, 2007). A variety of GOF

indices were identified in literature, and the findings of the current study were evaluated following indices recommended in literature (Byrne, 2009; Hair et al., 2010; Reisinger & Mavondo, 2007) displayed in Table 5.9 (below):

**Table 5.9: Goodness of Fit Criterion  
(Hair et al., 2010; Reisinger & Mavondo, 2007)**

<b>Goodness of fit criterion</b>	<b>Acceptable level</b>	<b>Interpretation</b>
$\chi^2$	Low value (relative to degrees of freedom) with significance level <0 .05	Values greater than 0.05 reflect acceptable fit; Values between 0.05 and 0.20 indicate a good fit; Non-significant and small values show good fit; Significant and large values show poor fit.
$\chi^2 / DF$	Less than 2 or 3	Values close to 1 reflect good model fit; Values less than 3 reflect acceptable fit; Values > 3, or <5 acceptable
<b>RMSEA</b>	<0 .08	Values less than 0.05 reflect a good fit; Values between 0.05 and 0.08 reflect reasonable fit.  Estimates how well the fitted model approximates the population covariance matrix per degree of freedom
<b>GFI</b>	0.90 or higher	Values greater than 0.90 reflect good fit.  Shows the amount of variances explained by model. It is the equivalent of $R^2$ in multiple regressions
<b>AGFI</b>	0.90 or higher	Values greater than 0.90 reflect a good fit. Adjusts model fit for the degrees of freedom relative to the number of variables
<b>CFI</b>	Value close to 1	Values greater than 0.90 reflect a good fit. Penalises for sample size, gives the best approximation of the population value for a single model
<b>TLI</b>	Value close to 1	Values greater than 0.90 reflect a good fit; Values less than 0.90 indicate the need to respecify the model. Compares an absolute null model with the theoretical model of interest, penalises for model complexity
<b>NFI</b>	Value close to 1	Values less than 0.90 indicate the need to respecify model. Reflects the proportion by which model improves fit compared to the null model, provides a measure of the proportion of total covariance accounted for by the model

After evaluating the measurement model fit, assessing the validity and reliability of constructs were conducted. Prior to interpreting the CFA results, definitions of various types of validity are presented as follows.

### **5.6.1 Construct validity**

As mentioned in Chapter 3, construct validity is the extent to which the instrument measures what it is supposed to measure. Specifically, it is a way of validating the construct the instrument is intended to measure (Churchill & Iacobucci, 2005). In a similar way, construct validity is the degree to which a set of measured variables actually represents the theoretical latent construct they intend to measure (Hair et al., 2010). Thus, to test the measurement model, two forms of construct validity have to be tested: convergent validity and discriminant validity.

#### **5.6.1.1 Convergent validity**

It is the degree to which the items that are specified to measure a construct, share a high percentage of variance in common (Hair et al., 2010). To measure the relative amount of convergent validity, the rules of thumb of Hair et al. (2010) are followed:

##### **(1) Factor loadings**

Factor loadings are an important indication of convergent validity. High loadings (standardised regression weights) which are greater than 0.50 and 0.70 are an indication of variables' convergence at a common point (Hair et al., 2010). Hence, factor loading is the first step in assessing construct validity.

##### **(2) Average Variance Extracted (AVE)**

It is the mean of the total variance extracted of the indicators loading on the latent construct (Hair et al., 2010), and is calculated by the following formula:

$$AVE = \frac{\sum_{i=1}^n \lambda_i^2}{n}$$

Where  $\lambda$  is the standardised factor loading and  $i$  is the items' number. A value of 0.5 or above is a good indication that items demonstrate convergent validity.

A lower value of  $(AVE) < 0.5$  indicates that an amount of variation has been explained whereas the rest remains unexplained (i.e. error variance) (Hair et al., 2010).

### (3) Construct reliability

Construct Reliability (CR) is the third measure of convergent validity. To test the degree of CR when using SEM, the following formula is employed. Simply it is the squared sum of the factor loadings ( $L_i$ ) for each construct and the sum of the error variance terms for a construct ( $e_i$ ) as described below:

$$\frac{(\sum_{i=1}^n L_i)^2}{(\sum_{i=1}^n L_i)^2 + \sum_{i=1}^n e_i}$$

$$(\sum_{i=1}^n L_i)^2 / (\sum_{i=1}^n L_i)^2 + \sum_{i=1}^n e_i$$

A value of 0.70 for CR is an indication of good construct reliability.

#### 5.6.1.2 Discriminant validity

As discussed previously in Chapter 3, this is the degree to which the latent construct discriminates from other latent constructs in the conceptual framework. In particular, discriminant validity stands for the amount of variance the latent construct is accounted for rather than measurement error or another construct

(Farrell, 2010). To test discriminant validity, an assessment of shared variance with AVE is a must. Shared variance is the relative amount of variance that a construct is explaining in another construct. Specifically, to measure discriminant validity a comparison is made between AVE (i.e. the amount of variance extracted among a set of indicators on a latent construct) and shared variance (i.e. the proportion of variance extracted in observed variables related to another construct that a latent construct accounted for) (Farrell, 2010). Simply, the percentage of AVE and the square of correlation between each two constructs must be examined (Fornell & Larcker, 1981). If, AVE is less than the squared correlation estimate between the two constructs, it is an indication of a violation to discriminant validity.

To conduct confirmatory factor analysis on every construct in the model, a measurement model describing each construct with its measurement variables (i.e. indicators) was used. All indicators were specified as reflective to their associated construct. Three indicators per construct and covariance between constructs were applied. To estimate the model parameters, maximum likelihood method was employed.

## **5.6.2 Findings of CFA**

### **5.6.2.1 Integration quality**

Employing EFA to indicators of integration quality showed one factor, but theoretically two were expected. Thus, a CFA test conducted on 'Integration quality' to test the assumption that integration quality is composed of two dimensions channel service configuration and integrated interactions. All factor loadings of the items on their latent constructs were significant  $p < 0.001$ . The average variance extracted for the two constructs were (46%) and (55%) respectively. The average variance extracted (AVE) for channel service configuration was less than the squared correlation between channel service configuration and integrated interactions (0.710), which is a violation of discriminant validity. Construct reliability for all the indicators was above 0.70. Thus, an attempt to combine all indicators under one factor integration quality is

tested. After combining the items under one construct, average variance extracted (AVE) is still less than 0.5 (45%).

The new measurement model after combining the factors under one construct integration quality was re-estimated with the following results:  $\chi^2=21.003$ ; (DF=7; p=0.004); CMIN/DF= 3.000; GFI= 0.987; AGFI= 0.962; NFI= 0.980; TLI= 0.971; CFI= 0.987; RMSEA= 0.062.

Standardised factor loadings, t-values and composite reliability are displayed in the following table 5.10:

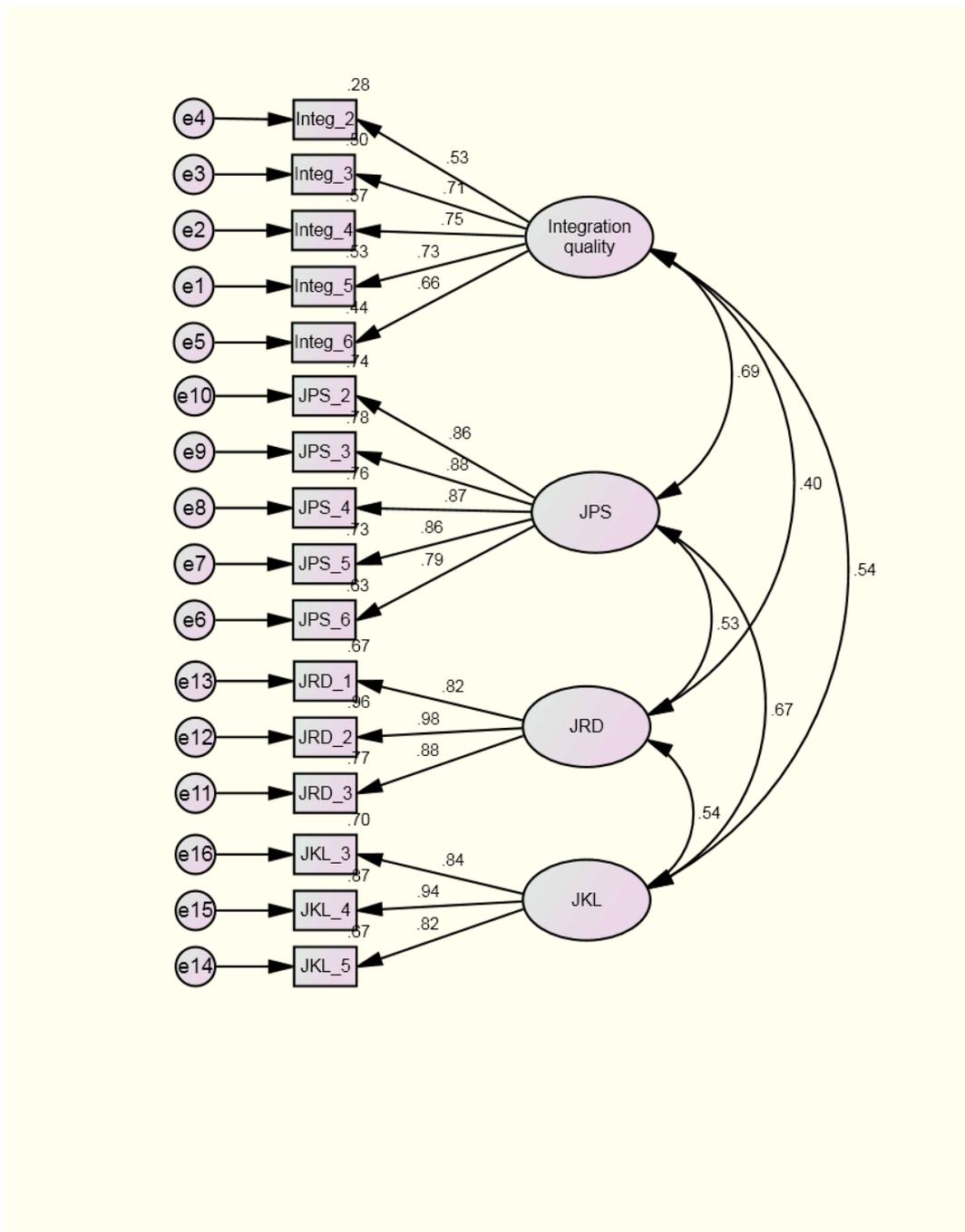
**Table 5.10: Measurement model of integration quality**

<b>Integration quality</b>	<b>Standardised loadings</b>	<b>t-Value</b>
Integ_Q1 My bank enables me to choose between alternative channels for a given service	0.641	-
Integ_Q2 My bank enables me to accomplish my transactions by simply using one channel	0.518	10.345
Integ_Q3 My bank makes me aware of all channels and the services available through them	0.803	13.897
Integ_Q4 My bank makes me aware of the price implications, if any, of using different channels	0.746	13.909
Integ_Q5 I am confident that I can receive the same response to my query regardless of the channel I use	0.702	12.213
Integ_Q6 I am confident that the service provided to me through one channel takes into account my previous interactions through other channels	0.606	11.510
<b>Composite reliability</b>	0.832	
<b>AVE</b>	45.676%	

### **5.6.2.2 Co-creation experience**

The three dimensions of co-creation experience as hypothesised were tested by CFA to test the unidimensionality of the factors. Co-creation dimensions with Integration quality were subjected to CFA. Findings of CFA indicate that ‘Co-creation experience’ as a joint activity is a function of 3 dimensions (JPS, JRD, JKL) as evaluated by goodness-of-fit:  $\chi^2 = 277.477$ ; (DF = 94;  $p < 0.001$ ); CMIN/DF=2.952; NFI=0.955; TLI=0.961; CFI= 0.969; GFI= 0.938, AGFI=0.910; RMSEA=0.06. In particular, two more items were removed to achieve the best fit (Integ\_Q1, JPS\_1). The following figure 5.1 displays the measurement model of the three dimensions of co-creation experience and integration quality.

**Figure 5.1: Measurement model of integration quality and co-creation experience**



To examine the convergent and discriminant validity of all constructs, the average variance extracted for all constructs was assessed, with all values except integration quality above 0.50 (0.45). All factor loadings were above 0.5 ranging between 0.529 and 0.982.

Moreover, construct reliability values for all the latent constructs were above 0.70, ranging from (0.802) to (0.925) which is an indication of convergent validity as shown below in Table 5.11. To evaluate discriminant validity, the values of the square root of the AVE for all constructs were compared to the correlation values of all constructs. The square root of the AVE for JKL (0.829) was greater than the correlation between JKL and other constructs JPS (0.708), JRD (0.567), and integration quality (0.574). Similarly, the square root of the AVE for JPS (0.845) was greater than the correlation between other constructs JRD (0.540), JKL (0.708) and ‘integration quality’ (0.701). The square root of average variance extracted for JRD (0.894) was greater than the correlation between JRD and JPS (0.540), JKL (0.567) and integration quality (0.396). The square root of average variance extracted for integration quality (0.672) was less than the correlation between integration quality and JPS (0.701). To solve this issue, a test of the difference in chi square between the constrained and unconstrained model was estimated. Findings indicate that the chi-square of the constrained model (304.238) was greater than the chi-square of the unconstrained model (277.477) (Atuahene-Gima, 2005); thus, the two constructs are conceptually and empirically different. This is an indication that the four constructs are discriminated and this is evident in Table 5.11.

**Table 5.11: Construct reliability, Average Variance Extracted (AVE), Square root of AVE and correlations**

	<b>Composite reliability</b>	<b>AVE</b>	<b>JKL</b>	<b>JPS</b>	<b>JRD</b>	<b>Integration quality</b>
<b>JKL</b>	0.868	0.688	<i>0.829</i>			
<b>JPS</b>	0.925	0.713	0.708	<i>0.845</i>		
<b>JRD</b>	0.923	0.800	0.567	0.540	<i>0.894</i>	
<b>Integration quality</b>	0.802	<b>0.451</b>	0.574	0.701	0.396	<b>0.672</b>

Note: the diagonal (in italics) represents the square root of the average variance extracted for ‘integration quality’ and ‘co-creation experience’ constructs

### 5.6.2.3 Value-in-use and commitment

As opposed to the assumption presumed before that value-in-use was measured in five dimensions, the findings of EFA revealed that value-in-use is measured via three dimensions (i.e. convenience value, religious value and customer participation benefits). Thus, to test the third measurement assumption, a CFA was run on the three constructs presumably measuring value-in-use and the two dimensions of commitment. The findings of CFA as evaluated by goodness-of-fit measures are:  $\chi^2 = 346.779$  (DF = 92;  $p < 0.001$ ); CMIN/DF= 3.769; NFI= 0.928; TLI=0.929; CFI= 0.945, GFI=0.926, AGFI=0.891, RMSEA=0.07. All of the indicators had higher than acceptable loadings  $>0.50$ , which range between (0.673) to (0.893). The model demonstrated good fit which was reflected in the dimensions to partially support the third measurement proposition. To test the constructs validity, the two constructs (commitment and value-in-use) with their subsequent dimensions were subjected to CFA.

The average variance extracted for the constructs were above 0.50 which indicate convergent validity. Construct reliability values for all latent constructs were above 0.70, ranging from (0.803) to (0.873) as shown below in Table 5.12. This is an indication of convergent validity. The square roots of AVE for convenience value, customer participation benefits and religious value were (0.829), (0.710) and (0.823) respectively. These values were greater than the correlation between convenience value and religious value (0.476), convenience value and customer participation benefits (0.710), and the correlation between religious value and customer participation benefits (0.665). This is evidence of discriminant validity and an indication that each dimension of value-in-use is measuring a different aspect as shown in Table 5.12. Similarly, commitment dimensions show good evidence of discriminant validity. This is demonstrated as the square root of AVE of affective commitment and continuance commitment being (0.835) and (0.823) respectively. These values are greater than the correlation between both constructs (0.552).

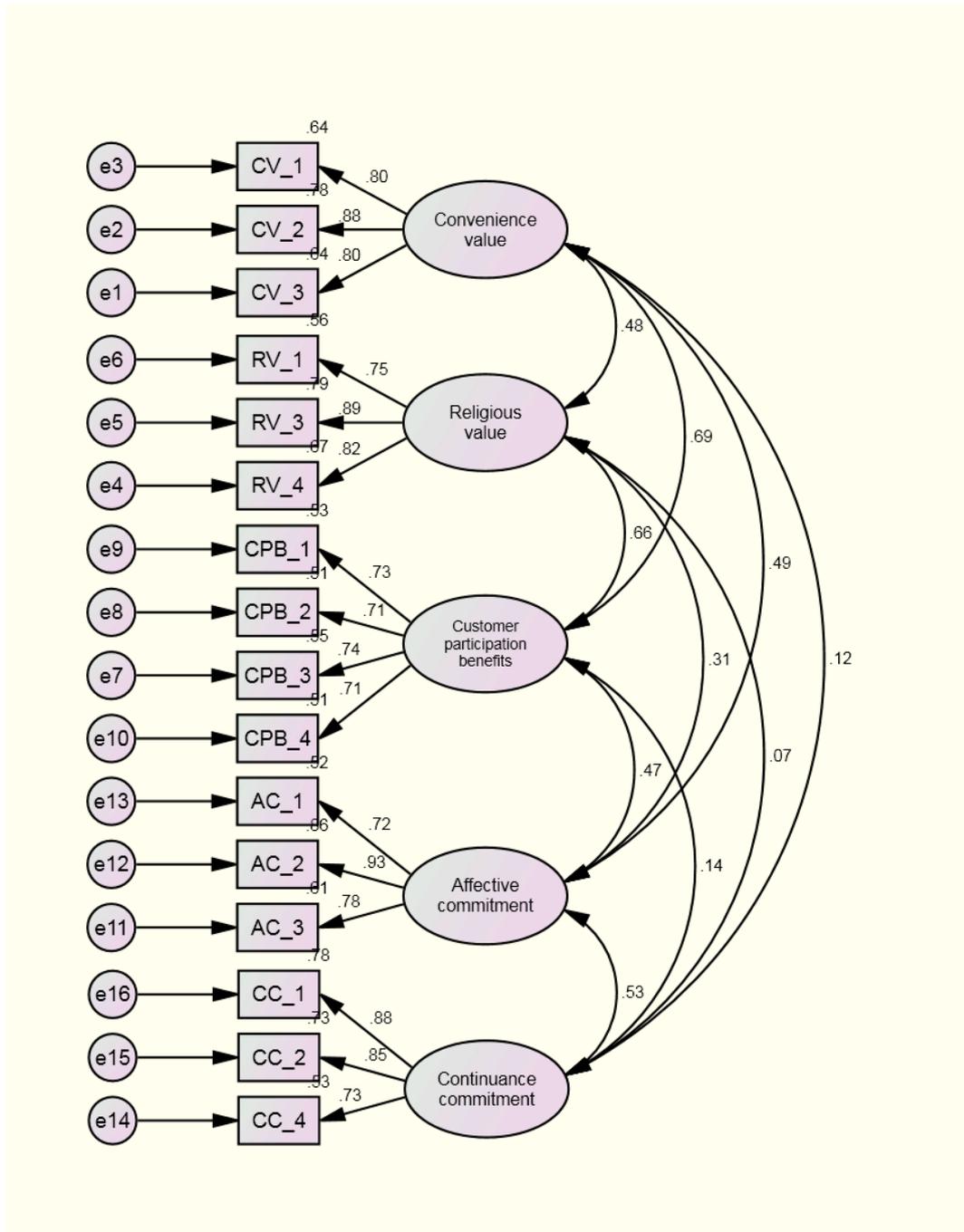
**Table 5.12: Construct reliability, Average Variance Extracted (AVE), square root of (AVE) and correlations**

	<b>Composite reliability</b>	<b>AVE</b>	<b>Affective commitment</b>	<b>Convenience value</b>	<b>Customer participation benefits</b>	<b>Continuance commitment</b>
<b>Affective commitment</b>	0.873	0.697	<i>0.835</i>			
<b>Convenience value</b>	0.868	0.687	0.476	<i>0.829</i>		
<b>Religious value</b>	0.862	0.677	0.308	0.476	<i>0.823</i>	
<b>Customer participation benefits</b>	0.803	0.505	0.495	0.710	0.665	<i>0.710</i>
<b>Continuance commitment</b>	0.863	0.678	0.552	0.119	0.066	0.123

Note: the diagonal (in italics) represents the square root of the average variance extracted for ‘value-in-use’ and ‘commitment’ constructs

The following figure 5.2 displays measurement model of the two constructs together value-in-use and commitment.

**Figure 5.2: Measurement model of value-in-use and commitment**



### ***5.7 Conclusion to chapter 5***

Throughout Chapter 5, a representation of the first stage of the analysis was explained. In particular, the main focus of interest of this chapter, was its confirmation of the study's main measurements' constructs and displayed findings of EFA and CFA. The chapter presented the findings of EFA and the subsequent decisions made on the results. After taking the final decisions on the dimensions of each constructs, a CFA was then conducted to confirm the dimensionality and viability of the measured constructs. The chapter concludes with a measure of 'co-creation experience' which was achieved by averaging the score obtained from both sections and coming up with new composite variables: joint problem-solving, joint relationship development, and joint knowledge and learning. In conclusion, the current study will test the full model and the mediation role of co-creation experience, which will be discussed in the following chapter.

## **Chapter 6 : Study 2 (quantitative): Customers’ co-creation experiences in a multichannel context: interaction experiences and outcomes**

### ***6.1 Introduction***

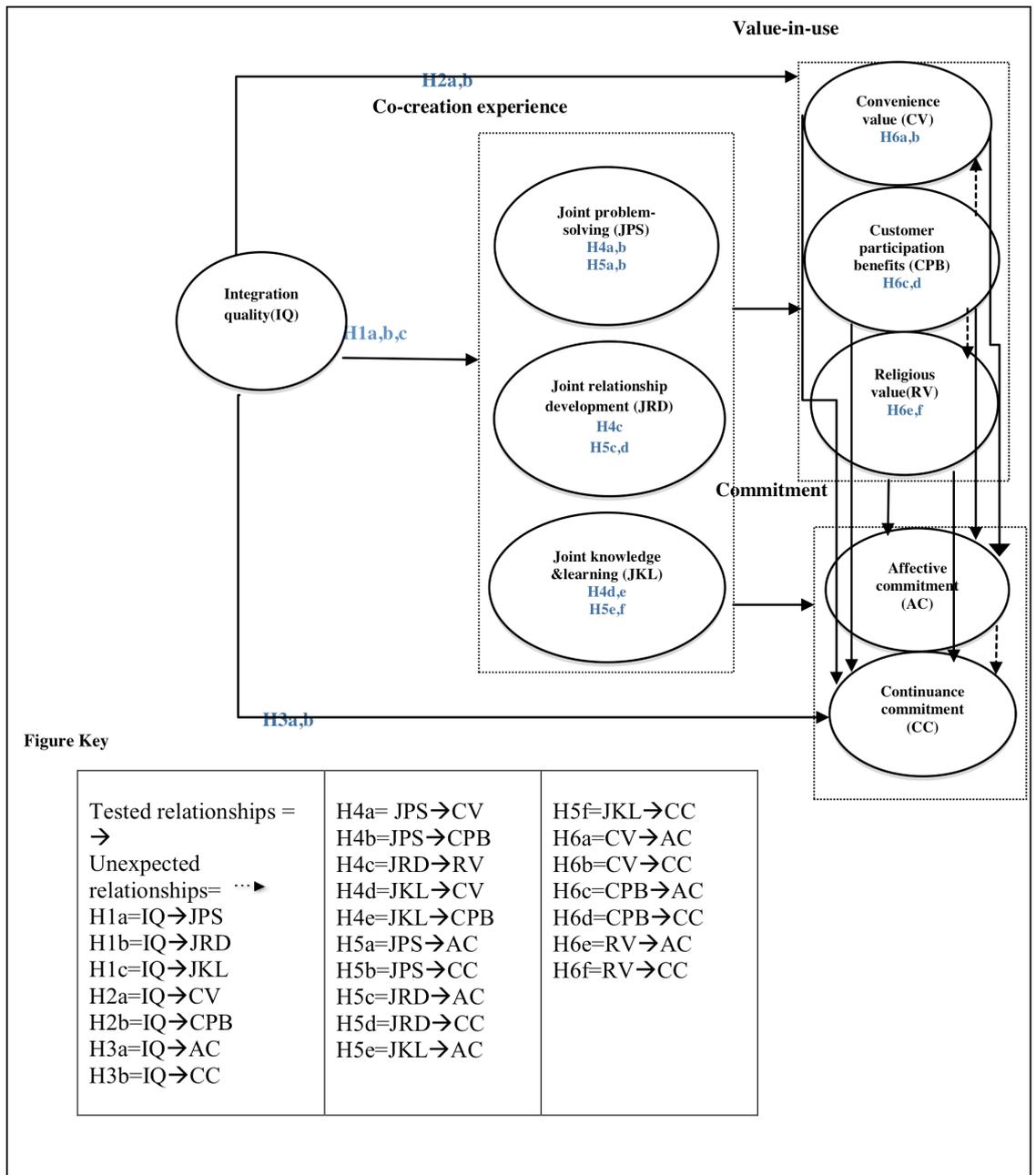
The present chapter focuses on testing the structural model and presenting the findings of testing the hypotheses of the study. A discussion and interpretation of the findings are also presented. Based on the main objectives of the study, a series of relationships are assumed to be important in the context of multichannel banking. Thus, based on the study’s main framework, a positive relationship is assumed between integration quality as independent variable (IV) co-creation experience (Mediator), value-in-use and commitment as dependent variables (DV). Moreover, a relationship between co-creation experience and outcome behaviours (value-in-use and commitment) was assumed to be positive. Hence, the previous relationships are tested via structural equation modelling to determine direct, indirect and total effect between the constructs under investigation. The findings and interpretations of the hypothesised relationships are now discussed in detail. After, testing the viability of the proposed relationships, a profile deviation assessment is used to measure the influence of the degree of customers’ perceived value of co-creation on value-in-use and outcome behaviours. The final type of analysis conducted is the independent sample test, to test whether there are any significant differences between the groups’ means (male and female).

### ***6.2 Discussion and interpretation of findings***

The main objective of the current thesis was to explore the elements that constitute co-creation experience in a multichannel banking context from the customers’ perspectives. After finding out what constitutes co-creation experiences, the factors that might influence these and their consequences were assessed. The current section discusses the data analysis results for the main hypotheses developed in this project, and the sub-hypotheses. The structural

model of the proposed relationships was anchored in the theoretical grounds as discussed in the previous chapters. A schematic display of the full structural model is presented in the following figure 6.1:

**Figure 6.1: Structural model based on Study 2**



Testing the structural model yielded  $\chi^2=988.542$ ;  $DF=399$ ;  $p<0.001$ ;  $CMIN/DF=2.478$ ;  $GFI=0.890$ ;  $AGFI=0.863$ ;  $RMSEA=0.053$ ,  $NFI=0.915$ ;  $TLI=0.938$ ;  $CFI=0.947$ . The findings of the total relationships tested in the final model are displayed in Table 6.1 as follows.

**Table 6.1: Results for structural model**

Hypothesised relationships	Unstandardised estimates	t-value	Hypothesis supported
Integration quality → Joint problem-solving	0.490 (0.063)	7.807***	Yes
Integration quality → Joint relationship development	0.563 (0.072)	7.844***	Yes
Integration quality → Joint knowledge and learning	0.476 (0.065)	7.274***	Yes
Integration quality → Convenience value	0.521 (0.093)	5.598***	Yes
Integration quality → Customer participation benefits	0.123 (0.070)	1.752	No
Integration quality → Affective commitment	0.182 (0.076)	2.396**	Yes
Integration quality → Continuance commitment	-0.092 (0.169)	-0.544	No
Joint problem -solving → Convenience value	-0.141 (0.090)	-1.576	No
Joint problem-solving → Customer participation benefits	0.410 (0.073)	5.624***	Yes
Joint problem-solving → Affective commitment	0.020 (0.066)	0.309	No
Joint problem-solving → Continuance commitment	0.064 (0.147)	0.434	No
Joint relationship development → Religious value	0.030 (0.030)	1.000	No
Joint relationship development → Affective commitment	0.187 (0.030)	6.280***	Yes
Joint relationship development → Continuance commitment	0.068 (0.065)	1.042	No
Joint knowledge and learning → Convenience value	-0.072 (0.051)	-1.394	No
Joint knowledge and learning → Customer participation benefits	-0.023 (0.045)	-0.520	No
Joint knowledge and learning → Affective commitment	0.148 (0.040)	3.686***	Yes
Joint knowledge and learning → Continuance commitment	0.260 (0.090)	2.904**	Yes

Note: \* $p<0.05$  \*\* $p<0.01$  \*\*\* $p<0.001$  Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

### **6.2.1 Testing the influence of integration quality on co-creation experience dimensions**

The first hypothesis to be tested proposed the influence of integration quality on the dimensions of the co-creation experience as follows:

**H1** Integration quality relates positively to co-creation experience

H1a Integration quality relates positively to joint problem-solving

H1b Integration quality relates positively to joint relationship development

H1c Integration quality relates positively to joint knowledge and learning

To test the previous hypotheses, an estimation of the direct effect of integration quality on co-creation experience, as represented by the three dimensions joint problem-solving, joint relationship development and joint knowledge and learning, is assessed.

In keeping with H1a, H1b and H1c, findings indicate that the direct effect of integration quality on joint problem-solving is positive and significant ( $b=0.490$ ,  $t=7.807$ ,  $p<0.001$ ), and an indirect effect of ( $b=0.252$ ,  $t=6.300$ ,  $p<0.001$ ) and total effect ( $b=0.743$ ,  $t=9.907$ ,  $p<0.001$ ), which is in support of H1a. Integration quality has a direct and positive impact on joint relationship development ( $b=0.563$ ,  $t=7.844$ ,  $p<0.001$ ) which is in support of H1b. The third hypothesis, H1c, was also supported, as the direct effect of integration quality on joint knowledge and learning is also positive and significant ( $b=0.476$ ,  $t=7.274$ ,  $p<0.001$ ), and an indirect effect of ( $b=0.171$ ,  $t=5.182$ ,  $p<0.001$ ) and a total effect of ( $b=0.647$ ,  $t=8.986$ ,  $p<0.001$ ) were also estimated and found to be positive and significant. Hence, the three hypotheses H1a, H1b, and H1c were supported. Testing the previous relationships is reported in Table 6.2 (below). Since all hypothesised impacts of integration quality on the three dimensions of the co-creation experience were positive and significant, its likelihood of being an antecedent factor in this experience increases. A possible explanation for this is

that integration quality in this study is about creating a seamless experience across channels in terms of availability of multiple channels and how customers receive coherent and consistent communications across channels. When customers experience disjointed or negative interactions, it confuses the flow, and the accuracy of the interaction is diminished (Payne & Frow, 2004). Thus, the study expected that customers who perceived high levels of integration quality in multichannel banking were more likely to engage in mutual interactions with their banks via different channels, and hence encourage value co-creation opportunities. Therefore, findings of the study confirmed this proposition. For instance, if the bank could provide coordinated channels to their customers in a way in which the customer could access consistent information, and in turn the bank could obtain a comprehensive view of the customer, then customers' problems would be solved or their knowledge would increase, or the two groups would build mutual relationships.

Moreover, the idea of providing the customer with a wide range of different channels to choose from supports their interaction with the bank, by providing different encounters to satisfy individual needs. Thus, providing the customers with multiple and coordinated channels for interaction increases the development of mutual relationships. This finding is in agreement with the literature on multichannel shopping and management, which confirmed that multichannel customers, compared to single channel customers, showed more trust in their suppliers and were inclined to deepen their relationships (Kumar & Venkatesan, 2005).

Moreover, Neslin, et al. (2006) indicated that customer-organisation relationship improvement is one of the potential benefits of multichannel coordination. This finding was also consistent with the earlier qualitative findings of the current thesis, which emphasised the importance of having advanced platforms to support efficient customer-employee interactions. In a similar way, as discussed above, a relationship between integration quality and joint knowledge and learning was also confirmed. This is because exposing customers to a wide variety of

channels facilitates their interaction with their bank's employees, and increases customers' learning and knowledge about banking offers, products and services; hence co-creation is increased. This mutual interaction, reinforced by coherent channels, enables the banks to capture a "single unified view of the customer" (Payne & Frow, 2004, p. 528) and know more about their customers' needs and abilities. In doing so, the banks can easily manage their customer's ability to integrate their resources and create value.

### **6.2.2 Testing the influence of integration quality on value-in-use dimensions**

The relationship between 'integration quality' and 'value-in-use' will be tested through H2 and the sub-hypotheses H2a and H2b as follows:

**H2** Integration quality relates positively to value-in-use

H2a Integration quality relates positively to convenience value

H2b Integration quality relates positively to customer participation benefits

Testing the previous hypotheses (H2a and H2b) (see, Table 6.2) (below) revealed a direct, positive and significant effect of integration quality on convenience value ( $b=0.521$ ,  $t=5.598$ ,  $p<0.001$ ), an insignificant indirect effect ( $b=0.129$ ,  $t=1.518$ ) and a total significant effect of ( $b=0.650$ ,  $t=6.915$ ,  $p<0.001$ ), which is in support of H2a. Although the direct link between integration quality and customer participation benefits was not significant ( $b=0.123$ ,  $t=1.752$ ), indirect ( $b=0.289$ ,  $t=4.313$ ,  $p<0.001$ ) and total effect ( $b=0.412$ ,  $t=5.568$ ,  $p<0.001$ ) were significant which means that H2b was not supported. Moreover, integration quality has significant indirect and total effects on religious value ( $b=0.333$ ,  $t=5.371$ ,  $p<0.001$ ). In summary, integration quality was found to have significant impact on convenience value and an insignificant effect on customer participation benefits.

These results are consistent with those of other studies which confirmed the link between service quality and customers' perception of value (Parasuraman & Grewal, 2000; Gallarza & Saura, 2006). In addition to that, the importance of having seamless multichannel service experiences was discussed in multichannel shopping literature. In this stream of literature, having a seamless service experience contributes to customer convenience. This finding was confirmed, as exposing customers to inconsistent information across channels causes customer inconvenience (Kumar & Venkatesan, 2005) and confusion (Payne & Frow, 2004). Thus, findings of the current study lend support to the impact of multichannel banking integration quality on convenience value.

### **6.2.3 Testing the influence of integration quality on commitment dimensions**

To test the proposed relationship the following two hypotheses need further testing:

**H3** Integration quality relates positively to commitment

H3a Integration quality relates positively to affective commitment

H3b Integration quality relates positively to continuance commitment

As demonstrated in Table 6.2 (below), although a direct and significant influence of integration quality on affective commitment ( $b=0.182$ ,  $t=2.396$ ,  $p<0.01$ ) was estimated, an insignificant impact on continuance commitment was found ( $b=-0.092$ ,  $t=-0.544$ ). This is an indication that H3 is partially supported. This means that a high level of integration quality seems to influence customers' emotional attachment to their bank. This finding seems to be consistent with other research which found that providing more channels creates increased loyalty (Neslin, et al., 2006; Neslin & Shankar, 2009). Furthermore, this finding confirms the service quality-commitment link found in literature (Dean, 2007).

The previous findings represent the significance of integration quality as a factor influencing the co-creation experience, value-in-use and commitment. This indicates that having a seamless service experience can support co-creation opportunities which emerge from different interaction aspects such as problem-solving and knowledge and learning and relationship development.

**Table 6.2: Direct, indirect and total effect of integration quality on co-creation experience and value-in-use**

Hypothesis Integration quality relates to	Direction	Direct effect		Indirect effect		Total effect		Supported
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Joint problem-solving	+	0.490 (0.063)	7.807***	0.252 (0.040)	6.300***	0.743 (0.075)	9.907***	Supported
Joint relationship development	+	0.563 (0.072)	7.844***	-	-	0.563 (0.075)	7.507***	Supported
Joint knowledge and learning	+	0.476 (0.065)	7.274***	0.171 (0.033)	5.182***	0.647 (0.072)	8.986***	Supported
Convenience value	+	0.521 (0.093)	5.598***	0.129 (0.085)	1.518	0.650 (0.094)	6.915***	Supported
Customer participation benefits	+	0.123 (0.070)	1.752	0.289 (0.067)	4.313***	0.412 (0.074)	5.568***	Not supported
Religious value		-	-	0.333 (0.062)	5.371***	0.333 (0.062)	5.371***	Unexpected
Continuance commitment	+	-0.092 (0.169)	-0.544	0.621 (0.177)	3.508***	0.529 (0.098)	5.398***	Not supported
Affective commitment	+	0.182 (0.076)	2.396	0.245 (0.081)	3.025***	0.427 (0.079)	5.405***	Supported

Note: \*p<0.05 \*\*p<0.01 \*\*\*p<0.001 Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

#### **6.2.4 Testing the influence of the co-creation experience dimensions on value-in-use dimensions**

To test the proposed overall relationship, H4 is developed:

**H4** Co-creation experience relates positively to value-in-use

As a co-creation experience was confirmed to be composed of three dimensions, a series of sub-hypotheses have to be tested:

H4a Joint problem-solving relates positively to convenience value

H4b Joint problem-solving relates positively to customer participation benefits

H4c Joint relationship development relates positively to religious value

H4d Joint knowledge and learning relates positively to convenience value

H4e Joint knowledge and learning relates positively to customer participation benefits

As can be seen from Table 6.3 (below), joint problem-solving is not related to convenience value ( $b=-0.141$ ,  $t=-1.576$ ), thus H4a was not supported; however, it has an indirect impact on convenience value ( $b=0.279$ ,  $t=3.822$ ,  $p<0.001$ ), which is positive and significant, but the total effect is not significant ( $b=0.138$ ,  $t=1.190$ ). Moreover, the direct link between joint problem-solving and customer participation benefits revealed positive and significant impacts ( $b=0.410$ ,  $t=5.624$ ,  $p<0.001$ ), lending support to H4b. In addition to that, an unexpected indirect and total effect of joint problem-solving on religious value was found to be significant ( $b=0.315$ ,  $t=4.500$ ,  $p<0.001$ ).

In keeping with H4c, no support was found for this hypothesis, as joint relationship development had an insignificant influence on religious value ( $b=0.030$ ,  $t=1.000$ ) (see Table 6.4). However, positive and significant indirect ( $b=0.060$ ,  $t=3.158$ ,  $p<0.001$ ) and total effects ( $b=0.090$ ,  $t=2.500$ ,  $p<0.01$ ) were found between joint relationship development and religious value. In addition to

that, positive indirect and total effects between joint relationship development and customer participation benefits ( $b=0.078$ ,  $t=3.391$ ,  $p<0.001$ ) were found to be significant. Additional unhypothesised positive and significant effects were found from joint relationship development to both joint problem-solving ( $b=0.120$ ,  $t=3.793$ ,  $p<0.001$ ) and joint knowledge and learning ( $b=0.303$ ,  $t=7.386$ ,  $p<0.001$ ). This is an indication of the critical role of building mutual relationships between the bank and its customers on other dimensions of the co-creation experience (i.e. joint problem-solving and joint knowledge and learning).

H4d and H4e proposed a positive effect of joint knowledge and learning on convenience value ( $b=-0.072$ ,  $t=-1.394$ ) and customer participation benefits ( $b=-0.023$ ,  $t=-0.520$ ), which were also not supported. Although the direct effect of joint knowledge and learning on customer participation benefits was negative and insignificant, the indirect effect ( $b=0.117$ ,  $t=3.343$ ,  $p<0.001$ ) was positive and significant, leading to a total effect ( $b=0.094$ ,  $t=1.843$ ) (see Table 6.5). Another important finding was that joint knowledge and learning had an unexpected, significant impact on joint problem-solving ( $b=0.286$ ,  $t=6.205$ ,  $p<0.001$ ). Several hypotheses were tested between the three dimensions of the co-creation experience and value-in-use dimensions, and only one supported H4a, lending partial support to H4.

In summary, among the unanticipated findings were that joint problem-solving and joint knowledge and learning were not related to convenience value. A possible explanation for this might be that customer participation in possible co-creation activities decreases their sense of convenience. For instance, customers expected their banks to solve their problems without necessarily sharing this responsibility with the customers. However, joint problem-solving demonstrates a positive and significant relationship to customer participation benefits. These findings offer support to the prevailing notion that when customers' problems are jointly solved, their perceived value of controlling and participating in their banking transactions is increased. This is attributed to the fact that customer

participation benefits mainly represented aspects of customers' perceived value of participation and control of their banking transactions.

In addition to that, joint relationship development plays a critical role in relation to the other dimensions of co-creation experience. The surprising significant influence of joint relationship development on both joint problem-solving and joint knowledge and learning, proved the fact that building mutual relationships is at the backbone of any mutual transaction. This finding supports previous research on the importance of building and maintaining stable relationships with customers to increase organisations' performance and revenues (Rajaobelina & Bergeron, 2009), and it demonstrates a good source of competitive advantage (Wong, Hung, & Chow, 2007).

### **6.2.5 Testing the influence of the co-creation experience dimensions on commitment dimensions**

To test the overall relationship between the co-creation experience dimensions on commitment dimensions, the following overall hypothesis and sub-hypotheses are tested:

**H5** Co-creation experience relates positively to commitment

H5a Joint problem-solving relates positively to affective commitment

H5b Joint problem-solving relates positively to continuance commitment

H5c Joint relationship development relates positively to affective commitment

H5d Joint relationship development relates positively to continuance commitment

H5e Joint knowledge and learning relates positively to affective commitment

H5f Joint knowledge and learning relates positively to continuance commitment

Testing the influence of the dimensions of the co-creation experience on commitment dimensions (H5) revealed interesting results. All the hypotheses associated with joint problem-solving (H5a and H5b), which proposed positive and direct effects on affective commitment ( $b=0.020$ ,  $t=0.309$ ) and on continuance commitment ( $b=0.064$ ,  $t=0.434$ ), were not supported (see Table 6.3) (below). However, H5c, which proposed a positive and direct impact of joint relationship development on affective commitment ( $b=0.187$ ,  $t=6.280$ ,  $p<0.001$ ), was significant and supported. In keeping with H5d, an insignificant relationship between joint relationship development and continuance commitment ( $b=0.068$ ,  $t=1.042$ ) was found, yet indirect ( $b=0.389$ ,  $t=6.274$ ,  $p<0.001$ ) and total ( $b=0.457$ ,  $t=6.260$ ,  $p<0.001$ ) effects on continuance commitment were found to be significant (see Table 6.4) (below). Furthermore, direct and positive relationships between joint knowledge and learning and both commitment dimensions were found to be significant. In particular, joint knowledge and learning demonstrated positive and significant impacts on affective commitment ( $b=0.148$ ,  $t=3.686$ ,  $p<0.001$ ) and continuance commitment ( $b=0.260$ ,  $t=2.904$ ,  $p<0.01$ ), which is in support of H5e and H5f. More importantly, a positive indirect effect of joint knowledge and learning on continuance commitment ( $b=0.213$ ,  $t=2.840$ ,  $p<0.01$ ), leading to a total effect of ( $b=0.473$ ,  $t=4.927$  and  $p<0.001$ ), were also found to be significant (see Table 6.5)(below).

Among the most intriguing results reported, is the influence of the co-creation experience dimensions on commitment dimensions. The findings demonstrate that only two dimensions of the co-creation experience (joint relationship development and joint knowledge and learning) were found to lead to affective commitment. In particular, joint problem-solving neither leads to convenience value nor to affective commitment. Combined, these findings increased the recognition of the importance of creating successful banking experiences for customers, and therefore every care should be taken by banks to avoid situations where customers face problems or experience any conflict. This is because, if companies fail to provide what their customers expect, it leads to their resentment and disappointment (Payne & Frow, 2004). However, joint knowledge and

learning is the only dimension which demonstrated a positive and strong impact on continuance commitment. This provides additional evidence of the importance of increasing customers' knowledge and improving their learning to increase their commitment.

**Table 6.3: Direct, indirect and total effect of joint problem-solving on value-in-use and commitment**

Hypothesis	Direction	Direct effect		Indirect effect		Total effect		Supported
Joint problem-solving relates to		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Convenience value	+	-0.141(.090)	-1.576	0.279(0.073)	3.822***	0.156(0.114)	1.4	Not Supported
Customer participation Benefits	+	0.410(.073)	5.624***	-	-	0.495(0.057)	8.684***	Supported
Religious value	+	-	-	0.315(0.070)	4.500***	0.315(0.070)	4.500***	Not Supported
Affective commitment	+	0.020(0.066)	0.309	0.024(0.030)	0.800	0.044(0.077)	1.107	Not Supported
Continuance commitment	+	0.064(0.147)	0.434	-0.067(0.126)	-0.532	-0.004(0.150)	-0.027	Not Supported

Note: \*p<0.05 \*\*p<0.01 \*\*\*p<0.001 Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

**Table 6.4: Direct, indirect and total effect of joint relationship development on value-in-use and commitment**

Hypothesis	Direction	Direct effect		Indirect effect		Total effect		Supported
Joint relationship development relates to		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Joint knowledge and learning	+	0.303(0.041)	7.386***	-	-	0.303(0.051)	5.941***	Unhypothesised
Joint problem-solving	+	0.120(0.032)	3.793***	0.087(0.022)	3.955***	0.207(0.040)	5.175***	Unhypothesised
Customer participation benefits	+	-	-	0.078(0.023)	3.391***	0.078(0.023)	3.391***	Unhypothesised
Religious value	+	0.030(0.030)	1.000	0.060(0.019)	3.158**	0.090(0.036)	2.500**	Not supported
Affective commitment	+	0.187(0.030)	6.280***	0.050(0.019)	2.632 **	0.237 (0.038)	6.237 ***	Supported
Continuance commitment	+	0.068(0.065)	1.042	0.389(0.062)	6.274***	0.457(0.073)	6.260***	Supported

Note: \*p<0.05 \*\*p<0.01 \*\*\*p<0.001 Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

**Table 6.5: Direct, indirect and total effect of joint knowledge and learning on value-in-use and commitment**

Hypothesis	Direction	Direct effect		Indirect effect		Total effect		Supported
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Joint knowledge and learning relates to								
Joint problem-solving	+	0.286 (0.046)	6.205***	-	-	0.286(0.058)	4.931***	Unhypothesised
Convenience value	+	-0.072(0.051)	-1.394	0.023(0.044)	0.523	-0.048(0.062)	-0.774	Not supported
Customer participation benefits	+	-0.023(0.045)	-0.520	0.117(0.035)	3.343***	0.094(0.051)	1.843	Not supported
Religious value	+	-	-	0.072(0.040)	1.800	0.072(0.040)	1.800	Unhypothesised
Continuance commitment	+	0.260 (0.090)	2.904**	0.213(0.075)	2.840	0.473(0.096)	4.927***	Supported
Affective commitment	+	0.148(0.040)	3.686***	0.010(0.023)	0.435	0.158(0.044)		Supported

Note: \*p<0.05 \*\*p<0.01 \*\*\*p<0.001 Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

## 6.2.6 Testing the influence of value-in-use on commitment

The relationships between value-in-use and commitment dimensions were also tested. An overall hypothesis, with six positive relationships between all value-in-use dimensions and commitment dimensions, was proposed.

### H6 Value-in-use relates positively to commitment

H6a Convenience value relates positively to affective commitment

H6b Convenience value relates positively to continuance commitment

H6c Religious value relates positively to affective commitment

H6d Religious value relates positively to continuance commitment

H6e Customer participation benefits relate positively to affective commitment

H6f Customer participation benefits relate positively to continuance commitment

H6a and H6b proposed to test the positive impact of convenience value on both affective commitment ( $b=0.013$ ,  $t=0.216$ ) and continuance commitment ( $b=-0.151$ ,  $t=-1.156$ ), which were not significant. Furthermore, H6c and H6d were to test the links between customer participation benefits and affective commitment ( $b=0.136$ ,  $t=1.617$ ) and continuance commitment ( $b=-0.249$ ,  $t=-1.314$ ), which were also not supported. The last pair of hypotheses (H6e and H6f) proposed to test the positive impacts of religious value on both dimensions of commitment. The direct impact of religious value on affective commitment ( $b=-0.107$ ,  $t=-2.293$ ,  $p<0.01$ ) and the total impact ( $b=-0.107$ ,  $t=-1.981$ ) were negative and significant, hence H6c was not supported. In keeping with H6d, the proposed positive impact on continuance commitment ( $b=-0.011$ ,  $t=-0.108$ ) was also not significant, and hence the hypothesis was not supported.

In summary, testing the relationships between value-in-use and commitment dimensions revealed one significant, yet negative, relationship between religious value and affective commitment, hence H6 was not supported. These findings contradict the value-commitment link found in literature (Luarn & Lin, 2003;

Pura, 2005). This is because none of the value-in-use dimensions have positive and significant impacts on commitment dimensions, except for religious value. Specifically, one of the most unexpected findings was the negative influence of religious value on affective commitment. This result may be explained by the fact that although customers value having products and services which adhere to Islamic rules, they distrust their banks' ability and credibility to provide such products and services. This explanation was also confirmed in the qualitative data from the first phase of the current thesis.

On the other hand, unpredicted relationships appeared to be of interest. Customer participation benefits were found to positively influence other value-in-use dimensions such as convenience value ( $b=0.681$ ,  $t=8.634$ ,  $p<0.001$ ) and religious value ( $b=0.768$ ,  $t=11.203$ ,  $p<0.001$ ). Another important unpredicted relationship was the influence of affective commitment on continuance commitment ( $b=1.340$ ,  $t=7.773$ ,  $p<0.001$ ). Findings are displayed in Table 6.6 (below).

**Table 6.6: Direct, indirect and total effect of value-in-use and commitment**

Hypothesis	Direction	Direct effect		Indirect effect		Total effect		Supported
		Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
<b>Value-in-use</b>								
<b>Convenience value related to</b>								
Affective commitment	+	0.013(0.059)	0.216	-	-	0.013(0.071)	0.183	Not supported
Continuance commitment	+	-0.151(0.131)	-1.156	0.017(0.096)	0.177	-0.134(0.155)	-0.865	Not supported
<b>Customer participation benefits</b>								
Religious value	+	0.768(0.069)	11.203***	-	-	0.768(0.095)	8.084***	Unhypothesised
Convenience value	+	0.681(0.079)	8.634***	-	-	0.681(0.114)	5.974***	Unhypothesised
Affective commitment	+	0.136(0.084)	1.617	-0.073(0.066)	-1.106	0.062(0.056)	1.107	Not supported
Continuance commitment	+	-0.249(0.190)	-1.314	-0.029(0.159)	-0.182	-0.278(0.131)	-2.122**	Not supported
<b>Religious value related to</b>								
Affective commitment	+	-0.107(0.047)	-2.293**	-	-	-0.107(0.054)	-1.981	Not supported
Continuance commitment	+	-0.011(0.106)	-0.108	-0.143(0.077)	-1.857	-0.155(0.127)	-1.220	Not supported
<b>Affective commitment related to</b>								
Continuance commitment	+	1.340(.172)	7.773***	-	-	1.340(.225)	5.956***	Unhypothesised

Note: \*p<0.05 \*\*p<0.01 \*\*\*p<0.001 Coefficient refers to unstandardised regression coefficient, standard error shown in brackets after t-value

### 6.3 Testing of mediation

#### The mediating role of co-creation experience in the relationship between integration quality and value-in-use and commitment

Testing for mediation was conducted and confirmed through structural equation modelling, by testing the following set of hypotheses. Due to the model complexity, testing for mediation was run on simplified models for each single indirect effect. Two overall hypotheses and sub-hypotheses were tested, as explained further. The findings of mediation testing are displayed in Table 6.7(below):

H7 Co-creation experience mediates the relationship between integration quality and value-in-use dimensions

H8 Co-creation experience mediates the relationship between integration quality and commitment dimensions

**Table 6.7: Mediating effects of co-creation experience between integration quality and value-in-use and commitment**

Hypothesis H7	Coefficient (Se)	t-value	Supported/not supported
IQ-----JPS-----CV	0.483 (0.093)	5.194***	Supported
IQ-----JPS-----CPB	0.389 (0.068)	5.721***	Supported
IQ-----JPS-----RV	0.361(0.067)	5.388***	Supported
IQ-----JRD-----CV	0.001(0.025)	0.040	Not supported
IQ-----JRD-----CPB	0.107(0.030)	3.567***	Supported
IQ-----JRD-----RV	0.101(0.031)	3.258***	Supported
IQ-----JKL-----CV	0.079(0.052)	1.519	Not supported
IQ-----JKL-----CPB	0.220(0.048)	4.583***	Supported
IQ-----JKL-----RV	0.163(0.045)	3.622***	Supported
Hypothesis H8	Coefficient (Se)		Supported/not supported
IQ-----JPS-----AC	0.174(0.059)	2.949**	Supported
IQ-----JPS-----CC	0.101(0.081)	1.247	Not supported
IQ-----JRD-----AC	0.145(0.034)	4.265***	Supported
IQ-----JRD-----CC	0.213(0.054)	3.944***	Supported
IQ-----JKL-----AC	0.307(0.061)	5.033***	Supported
IQ-----JKL-----CC	0.496(0.074)	6.703***	Supported

### **6.3.1 Joint problem-solving mediates the relationship between integration quality, value-in-use and commitment**

To test this mediating role, a set of hypotheses are proposed as follows:

H7a Joint problem-solving mediates the relationship between integration quality and convenience value

H7b Joint problem-solving mediates the relationship between integration quality and customer participation benefits

H7c Joint problem-solving mediates the relationship between integration quality and religious value

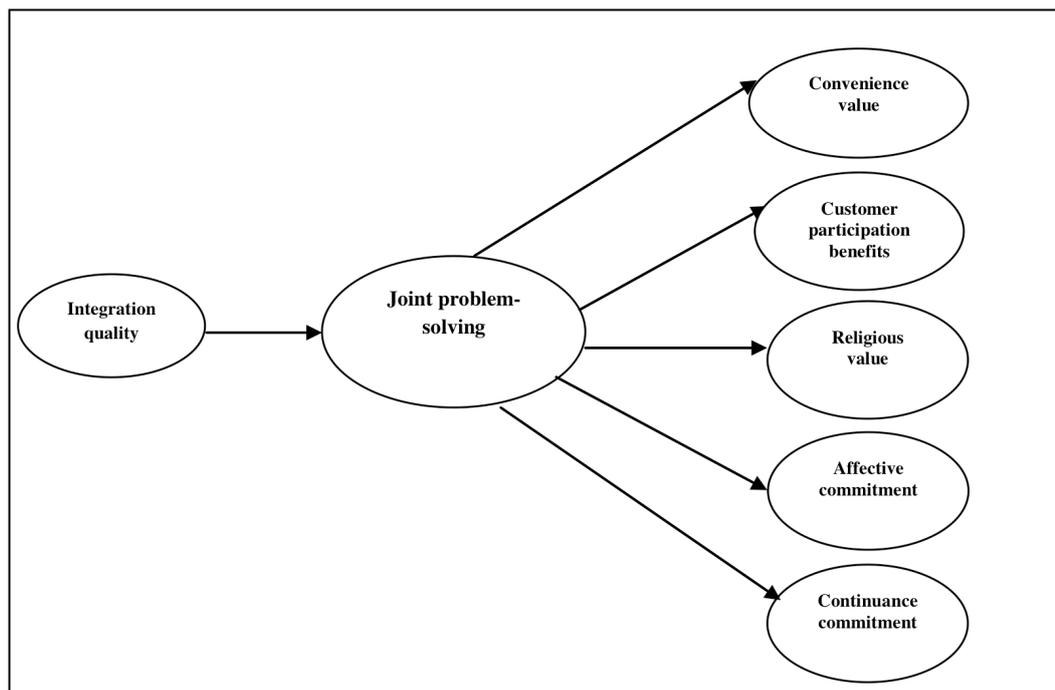
H8a Joint problem-solving mediates the relationship between integration quality and affective commitment

H8b Joint problem-solving mediates the relationship between integration quality and continuance commitment

Testing revealed a series of significant relationships. Based on the full model and the results reported in Table 6.2, integration quality had a positive and significant direct effect on convenience value ( $b=0.521$ ,  $t=5.598$ ,  $p<0.001$ ). Joint problem-solving also transmits the impact of integration quality on convenience value ( $b=0.483$ ,  $t=5.194$ ,  $p<0.001$ ) with a positive and significant impact, as can be seen in Figure 6.2. The relationship between integration quality and customer participation benefits via joint problem-solving is also positive and significant ( $b=0.389$ ,  $t=5.721$ ,  $p<0.001$ ). Joint problem-solving also mediates the relationship between integration quality and religious value ( $b=0.361$ ,  $t=5.388$ ,  $p<0.001$ ). This is an indication that the impact of integration quality on dimensions of value-in-use (i.e. convenience value, customer participation benefits and religious value) is fully mediated by joint problem-solving, lending support to hypotheses H7a, H7b and H7c.

The role of joint problem-solving as a mediator between integration quality and commitment dimensions was also estimated to indicate a significant positive relationship between integration quality and affective commitment ( $b=0.174$ ,  $t=2.949$ ,  $p<0.01$ ), which is in support of H8a. However, an insignificant impact of joint problem-solving on continuance commitment ( $b=0.101$ ,  $t=1.247$ ) was estimated, which indicates that H8b was not supported. In conclusion, whilst the findings partially supported the direct influence of joint problem-solving on value-in-use dimensions, testing the mediating role revealed its fully mediating function between integration quality and all value-in-use dimensions.

**Figure 6.2: Mediating effect of joint problem-solving**



### **6.3.2 Joint relationship development mediates the relationship between integration quality and value-in-use and commitment**

Testing the mediating role of joint relationship development between integration quality and value-in-use and commitment was also employed separately, as displayed in Figure 6.3, and necessitates testing the following set of hypotheses:

H7d Joint relationship development mediates the relationship between integration quality and convenience value

H7e Joint relationship development mediates the relationship between integration quality and customer participation benefits

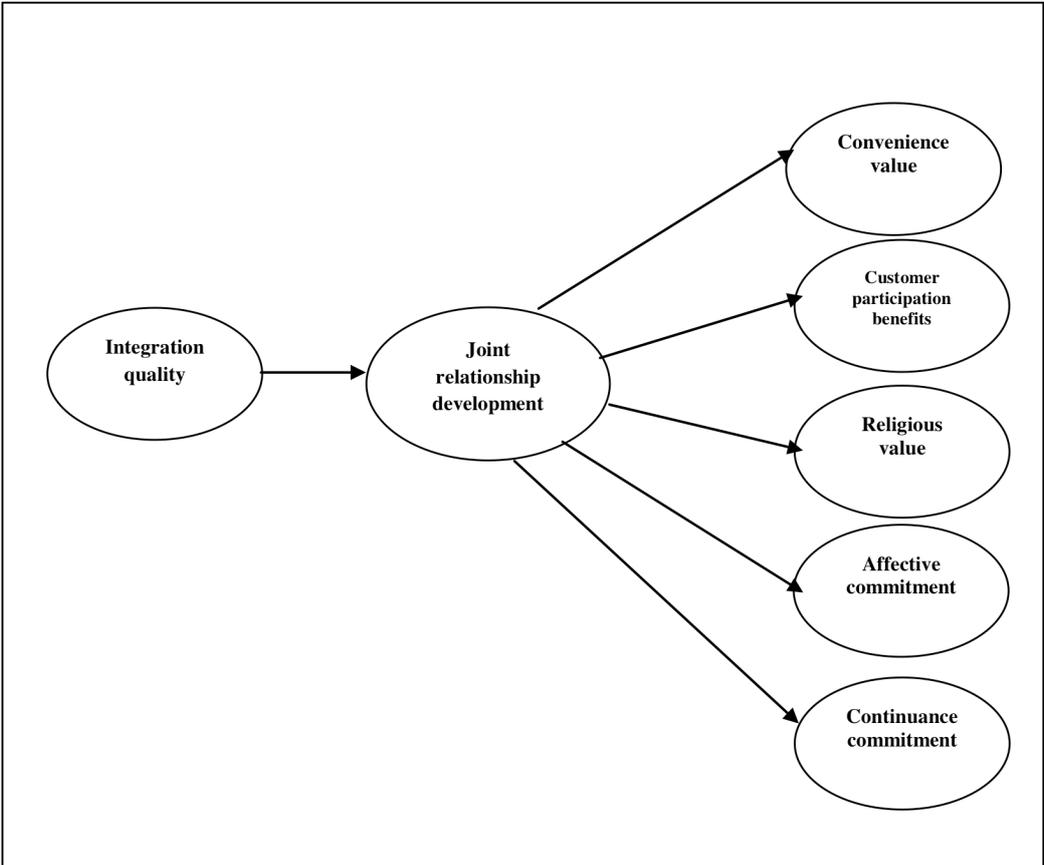
H7f Joint relationship development mediates the relationship between integration quality and religious value

H8c Joint relationship development mediates the relationship between integration quality and affective commitment

H8d Joint relationship development mediates the relationship between integration quality and continuance commitment

Testing whether joint relationship development mediates the relationship between integration quality and convenience value revealed an insignificant relationship ( $b=0.001$ ,  $t=0.040$ ), thus H7d was not supported. However, joint relationship development transmits the influence of integration quality on both customer participation benefits ( $b=0.107$ ,  $t=3.567$ ,  $p<0.001$ ) and religious value ( $b=0.101$ ,  $t=3.258$ ,  $p<0.001$ ), lending support to H7e and H7f. It is somewhat surprising that joint relationship development does not demonstrate a significant influence on religious value; however, it confirmed a partial mediating role between integration quality and value-in-use dimensions. Moreover, joint relationship development mediates the relationship between integration quality, affective commitment ( $b=0.145$ ,  $t=4.265$ ,  $p<0.001$ ) and continuance commitment ( $b=0.213$ ,  $t=3.944$ ,  $p<0.001$ ), which supports H8c and H8d. Consequently, joint relationship development fully mediates the relationship between integration quality and commitment dimensions.

**Figure 6.3: Mediating effect of joint relationship development**



### **6.3.3 Joint knowledge and learning mediates the relationship between integration quality and value-in-use and commitment**

Testing whether joint knowledge and learning mediates the relationship between integration quality and value-in-use dimensions is displayed in figure 6.4, and hence the following hypotheses are tested:

H7g Joint knowledge and learning mediates the relationship between integration quality and convenience value

H7h Joint knowledge and learning mediates the relationship between integration quality and customer participation benefits

H7i Joint knowledge and learning mediates the relationship between integration quality and religious value

H8e Joint knowledge and learning mediates the relationship between integration quality and affective commitment

H8f Joint knowledge and learning mediates the relationship between integration quality and continuance commitment

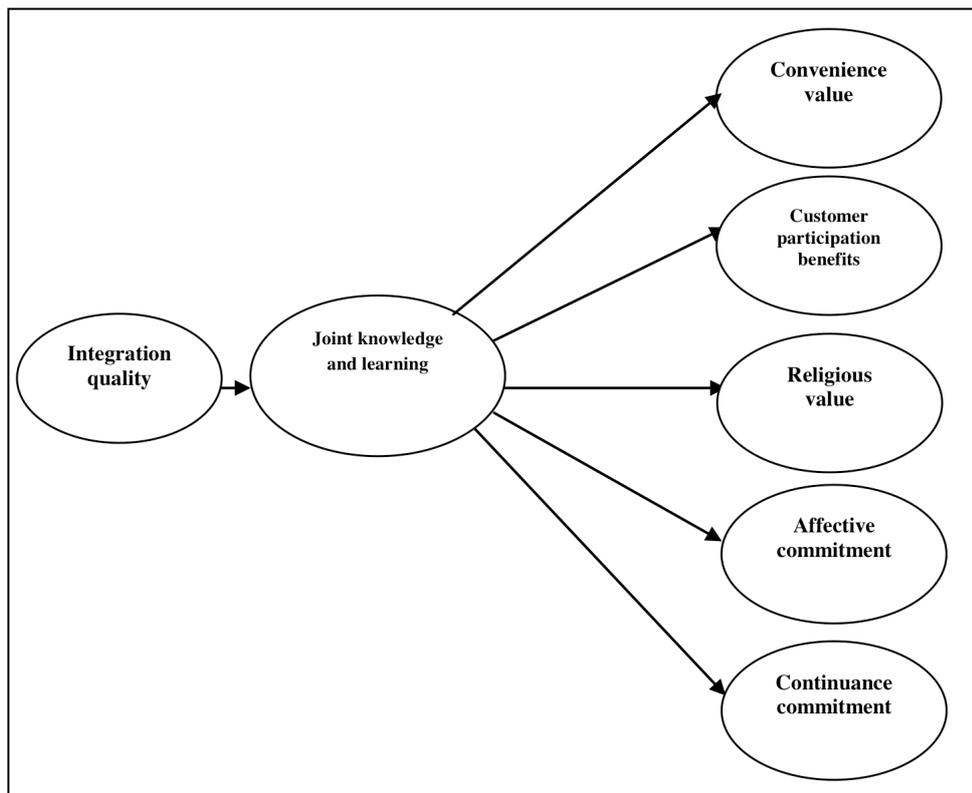
The findings confirmed that the mediating influence of joint knowledge and learning on the relationship between integration quality and convenience value was not significant ( $b=0.079$ ,  $t=1.519$ ), and hence H7g was not supported. Moreover, integration quality contributed towards customer participation benefits via the mediation of joint knowledge and learning ( $b=0.220$ ,  $t=4.583$ ,  $p<0.001$ ) with a significant effect, lending support to H7h. Joint knowledge and learning also mediates the relationship between integration quality and religious value ( $b=0.163$ ,  $t=3.622$ ,  $p<0.001$ ), which lends support to H7i. Hence, joint knowledge and learning partially mediates the relationship between integration quality and value-in-use dimensions.

Testing the role of joint knowledge and learning as a proxy to transmit the impact of integration quality on commitment dimensions revealed significant positive effects on both affective commitment ( $b=0.307$ ,  $t=5.033$ ,  $p<0.001$ ) and

continuance commitment ( $b=0.496$ ,  $t=6.703$ ,  $p<0.001$ ). Thus, H8e and H8f are also supported, which indicates that joint knowledge and learning fully mediates the link between integration quality and commitment. Although joint knowledge and learning demonstrated insignificant impacts on both convenience value and customer participation benefits, it partially mediates the links between integration quality and value-in-use dimensions.

In summary, testing the previous hypotheses supported the overall assumption that co-creation experience dimensions partially mediate the relationship between integration quality and value-in-use dimensions, and it also partially mediates the link between integration quality and commitment dimensions.

**Figure 6.4: Mediating effect of joint knowledge and learning**



#### ***6.4 Profile Deviation***

The concept of fit appeared to be of significant importance for theory building in different fields of research, specifically in strategic management (Van de Ven & Drazin, 1985; Venkatraman, 1989). However, the extant literature reveals a weak link between theory construction and theory testing due to the lack of congruence between the concept and mathematical formulation. Thus, Venkatraman (1989) has developed six perspectives of fit: fit as moderation, fit as mediation, fit as matching, fit as gestalts, fit as profile deviation and fit as co-variation. Moreover, choosing a particular perspective of fit depends mainly on clarifying the nature of alignment and aligning the perspective of fit with a methodological approach (Venkatraman, 1989). According to Venkatraman (1989) and Van de Ven and Drazin's (1985) usage of pattern analysis, profile deviation is simply the adherence to pre-specified profile.

PD (profile deviation) was employed according to the procedure improved by Venkatraman (1989). PD is found to be the best fit perspective appropriate in achieving the final purpose in relation to the constructed concept of the co-creation experience. Since the major aim of the current thesis is identifying the meaning of co-creation, and an improved measure of the construct was created and tested empirically, determining to what extent banking customers differ in their perceptions of co-creation was sought by conducting profile deviation analysis. In particular, PD is used in the current study to demonstrate if customers with high perception of value co-creation are different from those with a low perception of co-creation, and how this can influence their perception of value-in-use and commitment to the bank.

In fact, profile deviation is suitable when the aim is assessing the fit between multiple variables relative to the criterion variable (Venkatraman, 1989). Following this perspective, alignment is demonstrated via an adherence to an ideal profile, which is determined in advance either on a theoretical or empirical

basis, and deviation from which infers negative and significant implications for performance outcomes (Venkatraman & Prescott, 1990).

To conduct a PD, Venkatraman (1989) suggested two ways: either to improve a theoretically driven profile, which is anchored on a set of dimensions related to an external environment, or to construct an empirically driven profile. To conduct a PD, an ideal empirically driven profile was estimated by calibrating a sample of the top 10% co-creator customers (i.e. customers who responded with high values to co-creation experience items) as a benchmark. This benchmark was then compared to the rest of the sample. This benchmark then was compared to the rest of the sample (Malhotra, Mavondo, Mukherjee, & Hooley, 2012; Venkatraman & Prescott, 1990; Vorhies & Morgan, 2003). In particular, the main question that PD is trying to answer is how far the participants of the non-calibrated sample are different from the best 10% co-creators.

Practically, this technique is demonstrated by calculating the Euclidian distances of the rest of the sample from the benchmark of the best co-creators using the formula improved by Venkatraman (1989). In particular, the concept of co-alignment is better represented as misalign as it is demonstrated by negative and significant correlation, thus it is called MISALIGN and described by the following formula:

$$\text{MISALIGN} = \sqrt{\sum_{j=1}^N (X_{ij} - M_{ij})^2}$$

$$\text{MISALIGN} = \sum_{j=1}^N X_{ij} - M_{ij}$$

Where MISALIGN is a degree of misfit,  $X_{ij}$  the value for the unit along the  $j_{\text{th}}$  co-creation experience dimensions, and  $M_{ij}$  the mean for the calibration sample along the  $j_{\text{th}}$  co-creation experience dimensions. The final step is estimating the relationship to the criterion variable (i.e. value-in-use dimensions and commitment dimensions). The greater the Euclidean distance from the ideal

calibration sample, the poorer customer perception of value-in-use and commitment will be. In particular, a significant negative correlation must be found to achieve the purpose of the profile deviation (Conrad, Brown, & Harmon, 1997). If a significant negative correlation is found in our analysis, this means that the participants of the non-calibrated sample, who are significantly different from our best 10% co-creators, are not interested in collaborating in co-creation activities (i.e. joint problem-solving, joint relationship development and joint knowledge and learning). The findings of PD analysis are displayed in the following table:

**Table 6.8: Findings of Profile Deviation**

IV	Convenience value	Customer participation benefits	Religious value	Affective commitment	Continuance commitment
PD	-.416***	-.427***	-.405***	-.603***	-.417
Age	-.038	.049	.002	-.009	-.084
Education	.157***	.144***	.102***	.082	-.101
R2	.174	.201	.158	.367	.241
Adj. R2	.167	.195	.152	.362	.235
F-ratio	26.595***	31.796***	23.802***	73.336***	40.161***

The PD across all dependent variables was negative and significant. This indicates that the top 10% co-creating customers in the calibration sample were significantly different from the rest of the sample. This implies that deviating from the top 10% is associated with poorer perceptions of the dependent variables (i.e. convenience value, customer participation benefits, religious value, affective commitment and continuance commitment). The PD model can be considered robust given that it was controlled for age and education. Education was consistently significant and positive except with continuance commitment. It was also found to be significant with convenience value and this can be explained, as educated customers seemed to perceive the value of convenience more than others. Gender was only significant with continuance commitment. However, age was not significant across all variables. This means that the age of the co-creating customers does not impact their perception of dependent variables.

In summary, a PD enabled identifying the best co-creator customers and how they were significantly different from the rest of the sample in terms of their perception of the dependent variables. The findings of this analysis add further evidence to the importance of the co-creation of value on impacting customers' perception of value-in-use and their attachment to their bank (commitment). This means that customers with a high inclination to co-create value with banks seemed to be happier and more satisfied.

### ***6.5 Independent sample t-test***

In Saudi Arabia, males and females are served in different branches; hence, the study further investigates whether males and females have different perceptions of the main variables of the study. To do so, an independent sample t-test was employed to demonstrate if there are any significant differences between the mean of male and female groups in relation to joint problem-solving, joint relationship development, joint knowledge and learning, convenience value, religious value, customer participation benefits, affective commitment and continuance commitment. The t-test findings revealed a significant difference in the mean of 5 variables (joint problem-solving, joint knowledge and learning, customer participation benefits, affective and continuance commitment) between the two groups. In particular, JPS ( $t= 2.880, p<0.01$ ), JKL ( $t=3.057, p<0.01$ ), CPB ( $t=3.008, p<0.01$ ), AC ( $t=3.396, p<0.001$ ) and CC ( $t=5.141, p<0.001$ ). Surprisingly, no differences were found between the groups in relation to joint relationship development, religious value and convenience value, which is displayed in detail in the following table 6.9:

**Table 6.9: Findings of independent sample t-test**

Variable	Male	Female	t- value	Sig.(2-tailed)	Mean difference
<b>Joint problem-solving (JPS)</b>	5.090	5.370	2.880**	0.004	0.280
<b>Joint relationship development (JRD)</b>	4.568	4.741	1.346	0.179	0.173
<b>Joint knowledge and learning (JKL)</b>	4.821	5.120	3.057**	0.002	0.299
<b>Convenience value (CV)</b>	5.647	5.767	1.111	0.267	0.119
<b>Customer participation benefits (CPB)</b>	5.921	6.183	3.008**	0.003	0.262
<b>Religious value (RV)</b>	6.014	6.011	-0.025	0.980	-0.003
<b>Affective commitment(AC)</b>	5.152	5.544	3.396***	0.001	0.392
<b>Continuance commitment (CC)</b>	3.707	4.498	5.141***	0.001	0.791

## ***6.6 Conclusion to chapter 6***

This chapter discusses the project’s main findings of testing the full model and hypotheses, and provides an interpretation and explanation of these findings. The chapter also discussed the role of the co-creation experience as a mediator between integration quality and value-in-use and commitment dimensions. The chapter also presented and discussed a profile deviation technique and its findings. The final part of the chapter discussed the use of the independent t-test analysis and its major findings. The following chapter concludes the project and presents the main findings.

## **Chapter 7 : Conclusions to the project**

### ***7.1 Introduction:***

In recent years, there has been an increasing recognition and interest in the importance of customer value creation and how it contributes to organisational performance. Although a considerable amount of literature has addressed this area of research, there is a continuing debate about the applicability of S-D logic in specific contexts, and the features and measurement of co-creation. Therefore, the major aim of the current thesis was to provide an empirical work on the dimensions of the co-creation experience and value-in-use, in multichannel banking in a developing country. This chapter summarises the main findings of the project and shows how it contributes to the literature, S-D logic and service logic. It provides managerial implications and concludes with a discussion of the main limitations of the study, and suggestions for future research.

### ***7.2 Findings***

The present study was designed to understand the meaning of the co-creation experience in the banking industry in the context of Saudi Arabia, and the role of both the banks and their customers in contributing to this experience. In this investigation, the aim was to develop new measures (i.e. co-creation experience and value-in-use) by using the literature and initially undertaking a qualitative study. Data were then collected to empirically test the hypothesised measures and relationships using the model shown in Figure 7.1. The focus of the study was on relationships between the co-creation experience, integration quality as an antecedent and customers' perception of value (i.e. value-in-use) and commitment. In addressing its aims, the project investigated five main questions:

Q1: How do banks and their customers work together (i.e. co-create) to produce value in a multichannel banking context?

Q2: What antecedent factors influence the co-creation experience in a

multichannel banking context?

Q3: What constitutes overall value (value-in-use) for customers in relation to multichannel banking?

Q4: How do customers' co-creation experiences influence their perceptions of value-in-use?

Q5: How do customers' co-creation experiences influence their commitment to their banks?

The project used two sequential studies, now considered in turn.

### **7.2.1 Summary of the main findings of Study 1 (qualitative)**

The qualitative inquiry demonstrated in Study 1 assisted in determining the dimensions constructing the co-creation experience from both the banking managers' and customers' perspectives; the factors that might contribute to this experience were also explored. The study comprised 33 in-depth interviews, which produced different themes and categories in response to the first three questions shown above. Analysis of the group of managers identified 12 different themes from many categories, showing how managers perceive their role of value facilitators. The results of this qualitative investigation included the themes of problem-solving strategy, understanding customers' needs and building strong relationships with customers, through which value facilitation takes place.

Analysis of the customer interviews also revealed a variety of themes through which value creation is perceived. Some themes were consistent with managers' perceptions, but other intriguing themes included temporal value, problem-solving strategy, security concerns, relationship development and consistency. Moreover, the study also identified different areas of interaction where value co-creation opportunities emerged. One of the most significant findings is that the co-creation experience is made up of three dimensions: joint problem-solving, joint relationship development and joint knowledge and learning. The following

table 7.1 summarises the main co-creation opportunities identified from the qualitative data:

**Table 7.1: Potential opportunities for co-creation**

<b>Themes</b>	<b>Co-creation opportunities for managers</b>	<b>Co-creation opportunities for customers</b>
<b>Joint problem- solving</b>	<ul style="list-style-type: none"> <li>- Identifying customers' financial problems and providing solutions to restructure the financial situation</li> <li>- Enabling the customer to track the progress of solving the problem</li> </ul>	<ul style="list-style-type: none"> <li>- Delivering feedback on the quality of the bank's service via various channels</li> <li>- Monitoring the progress of their request</li> </ul>
<b>Joint relationship development</b>	<ul style="list-style-type: none"> <li>- Calling customers when they do not use services for a long time</li> <li>-Attending events based on customers' invitations</li> <li>- Sending gifts to customers on occasions</li> </ul>	<ul style="list-style-type: none"> <li>- Visiting the branch on a regular basis to get to know the employees and to strengthen the relationship</li> <li>- Willing to build mutual relationship with the bank's employees</li> </ul>
<b>Joint knowledge and learning</b>	<ul style="list-style-type: none"> <li>- Updating customers in terms of new offers, services, system failures, system maintenance, new security measures, and new terms and conditions</li> <li>- Assigning an employee to teach customers how to use different channels more effectively</li> </ul>	<ul style="list-style-type: none"> <li>- Accessing information in each channel to be updated about new offers, changes, etc.</li> <li>- Accessing information in each channel to learn how to use the channel</li> <li>- Interacting with bank employees to help them use different channels more effectively</li> </ul>
<b>Consistency</b>	<ul style="list-style-type: none"> <li>- Providing a consistent banking system to support mutual interaction and hence co-create value that is flawless and efficient</li> </ul>	<ul style="list-style-type: none"> <li>- Co-create value-in-use by utilising services that are synergised, known and tracked across all channels</li> </ul>
<b>Temporal value</b>	<ul style="list-style-type: none"> <li>- Providing different banking channels that are available 24/7</li> </ul>	<ul style="list-style-type: none"> <li>- Accessing the banking channels whenever it is convenient to customers, to maximise benefits</li> </ul>
<b>Spatial/location value</b>	<ul style="list-style-type: none"> <li>- Providing different banking channels, available globally</li> </ul>	<ul style="list-style-type: none"> <li>- Accessing the banking channels wherever the customer is located at the time</li> </ul>
<b>Cultural concerns</b>	<ul style="list-style-type: none"> <li>- Providing customers with products and services that adhere to Islamic religion. E.g. facilitating charity contributions via a variety of banking channels</li> </ul>	<ul style="list-style-type: none"> <li>- Using the banking channels for charity contributions which support social and community responsibility.</li> </ul>

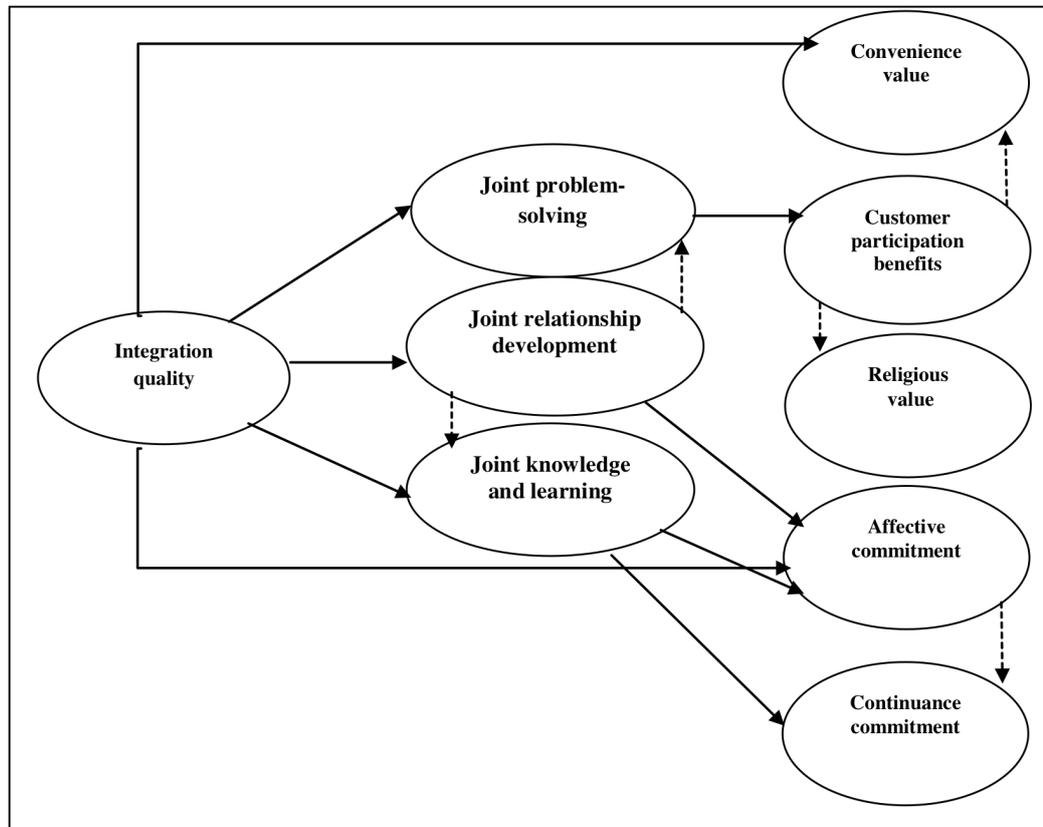
Another important finding from the qualitative inquiry was seeking insight into customers' perceptions of value and their integration of resources, when using multichannel banking. A major implication of the key findings is the ability to construct scales to measure the two constructs (i.e. co-creation experience and value-in-use) empirically.

Finally, based on the literature review and the findings of Study 1, the project discovered some potential factors impacting on the co-creation experience. More specifically, integration quality as an element of multichannel service quality, was identified as a potential antecedent of the different dimensions of the co-creation experience. Having proposed the dimensions and relationships in response to Questions 1, 2 and 3, the final aim of the current thesis was to test those relationships, i.e. to examine the influence of the co-creation experience on value-in-use and customer commitment (Questions 4 and 5). These findings are reported in the next section.

### **7.2.2 A summary of the main findings of Study 2 (quantitative)**

The quantitative inquiry aimed to confirm the measures based on the qualitative inquiry and to test the hypothesised relationships via a full structural model. The statistical testing confirmed the multidimensionality of the new scales for the co-creation experience and value-in-use in multichannel banking. Figure 7.1 (below) visually summarises the main findings of the quantitative study, which are subsequently discussed.

**Figure7.1: Summary of the main findings**



**7.2.2.1 Integration quality as an antecedent to the co-creation experience**

The empirical testing revealed that integration quality, as a dimension of multichannel service quality, was an essential factor impacting on customers’ co-creation experiences. There were several findings: first, the EFA suggested one factor only (integration quality) rather than two (channel service configuration and integrated interactions), and; second, the CFA revealed five significant items which validated the final scale as developed by Sousa and Voss (2006). Hence, the findings emphasise that integration quality is the most influential factor and it demonstrates significant and positive links to the three dimensions of customer co-creation experience, and to convenience value and affective commitment. These findings about integration quality as an antecedent to the dimensions of the co-creation experience are summarised in Table 7.2.

**Table 7.2: Summary to the link between integration quality and the co-creation experience**

<b>Integration quality is positively related to the dimensions of the co-creation experience</b>			
Hypotheses	Joint problem-solving (a)	Joint relationship development (b)	Joint knowledge and learning (c)
	Supported (Yes/No)	Supported (Yes/No)	Supported (Yes/No)
<b>H1a,b,c</b>	Yes	Yes	Yes
<b>Integration quality is positively related to value-in-use</b>			
	Convenience value	Customer participation benefits	Religious value
<b>H2a,b</b>	Yes	No	Not hypothesised
<b>Integration quality is positively related to Commitment</b>			
	Affective commitment	Continuance commitment	
<b>H3a,b</b>	Yes	No	

### 7.2.2.2 The multidimensionality of the co-creation experience and value-in-use

The findings of the EFA suggested three factors contributing to co-creation: joint problem-solving, joint relationship development and joint knowledge and learning. The SEM model showed good fit to the data. The dimensions have robust psychometric properties in this study. Thus, future studies might seek to confirm this multi-dimensionality of co-creation.

Consistent with the S-D logic's foundational premise, which is the customer is always a co-creator of value, the findings demonstrate customers' ability to co-create value with banks when facing a problem; this contributes to mutual relationship development and to an increase in knowledge and learning.

In addition, the findings of the EFA suggested that there were three factors contributing to value (i.e. convenience value, customer participation benefits and religious value) instead of the initial proposal of five factors. This outcome provides additional support of the fact that in the context of multichannel banking

in Saudi Arabia, value-in-use is a multidimensional construct, here comprised of three dimensions. Thus the findings of the current study extend the literature of customer-perceived value-in-use by creating a parsimonious and practical measure of value-in-use. The study also confirms previous literature which emphasised the multidimensionality of value (Sweeney & Soutar, 2001; Pura, 2005). Strong intercorrelations were also identified between the three dimensions of value-in-use, with customer participation benefits found to be the most important dimension, as it demonstrates correlations to all other value-in-use dimensions. A possible reason may be that one of the items measuring customer participation benefits ('I value doing transactions myself') highlights the importance of customers having the ability to manage and control their own banking transactions. Further, customers perceived control and participation in the process of maximising benefits increases their perception of convenience. The relationship between customer participation benefits and religious value emphasises the importance of enabling the customers to control their banking transactions, which in turn, contributes to the significance that they place on Islamic banking.

Convenience value was the second dimension representing value-in-use. This was expected because the relationship between convenience value and self-service technologies was confirmed in the literature (Anderson & Srinivasan, 2003; Pura, 2005). Convenience value in the current study is mainly about the ease of accessing and using different banking channels whenever and wherever convenient. In particular, the ability to access multiple banking channels for a required service and the ability to access them at the customer's ease with respect to time and location, was found to be valuable and critical to customers. Religious value is the third dimension representing value-in-use in multichannel banking in this study. This dimension is context-specific as it is critical to the Muslim society only. Given that the majority of the Saudi population is Muslim, the adherence to the Islamic banking systems is of great importance to them and the inclusion of this dimension was proposed as a result of interviews in Study 1.

### **7.2.2.3 Links between the co-creation experience, value-in-use and commitment**

As can be seen from Table 7.3 (below), the results of this investigation show that the proposed influence of the dimensions of co-creation experience on value-in-use dimensions was partially supported. Perhaps the most interesting findings are the positive and significant links between two dimensions of the co-creation experience (i.e. joint relationship development and joint knowledge and learning) and affective commitment. This is important, because bank managers can control these areas, and by improving on them, can easily increase customer commitment to their banks. However, joint knowledge and learning was the only dimension which positively impacted on continuance commitment. This finding shows how important it is to educate customers and keep them up to date with changes in banking. Empirical testing of the role of the co-creation experience dimensions as mediators of the link between integration quality and customer outcomes (i.e. value-in-use and commitment dimensions) found partial mediation effects. The results thus support the importance of successful co-creation experiences in increasing customers' commitment to their banks. In essence, creating successful interaction experiences, where customers can participate collaboratively with the banks to create more value, was found to link the customers to their banks emotionally. Taken together, these findings indicate that when customers are given the chance to participate with the banks to create more value, their desire to stay in a relationship with their banks is also strengthened. Table 7.3 (below) summarises the findings.

**Table 7.3: Summary of the links between the co-creation experience dimensions and value-in-use and commitment**

<b>Joint problem-solving to value-in-use</b>			
Hypothesis	Convenience value	Customer participation benefits	Religious value
<b>H4a,b</b>	No	Yes	Not hypothesised
<b>Joint problem-solving to Commitment</b>			
<b>H5a,b</b>			
	No		No
<b>Joint relationship development to value-in-use</b>			
<b>H4c</b>	Convenience value	Customer participation benefits	Religious value
	-	-	No
<b>Joint relationship development to Commitment</b>			
<b>H5c,d</b>	Affective commitment	Continuance commitment	
	Yes	No	
<b>Joint knowledge and learning to value-in-use</b>			
<b>H4d,e</b>	Convenience value	Customer participation benefits	Religious value
	No	No	Not hypothesised
<b>Joint knowledge and learning to Commitment</b>			
<b>H5e,f</b>	Affective commitment	Continuance commitment	
	Yes	Yes	

#### **7.2.2.4 Summary of profile deviation testing and independent samples t-test**

One of the most important investigations is the profile deviation (PD) testing which examines whether the best 10% of customers in terms of co-creation, were different from the rest of the sample in their perception of value-in-use and commitment to their banks. The findings demonstrated that significant differences exist between the best co-creators and the rest of the sample in terms of the five dependent variables (convenience value, customer participation benefits, religious value, affective and continuance commitment). That is, the

findings of PD testing further support the idea that customers with a higher inclination to co-create with their banks and to take further actions, also have higher value perceptions and commitment.

The final statistical independent sample t-test has also shown that the mean of female participants was significantly different from male participants in terms of the following variables: joint problem-solving, joint knowledge and learning, customer participation benefits, affective and continuance commitment. This finding appears to indicate that female customers perceive themselves as having a better banking experience than male customers, and it supports the existing strategy in Saudi Arabia of serving female customers in separate branches.

### ***7.3 Theoretical contributions***

The findings from the current project contribute to the literature of S-D logic, service logic, value creation, multichannel services and relationship marketing in several ways. They contribute by providing a greater understanding of the meaning and role of the co-creation experience, as facilitated by banks and perceived by customers, and achieved through mutual interaction in multichannel banking. The findings also contribute to the operations management literature in that the study tests the role of integration quality as an antecedent to the co-creation experience. So far, the current study is among the few that link these fields of research (integration quality, value co-creation, value-in-use and commitment), and to the researcher's knowledge, is the only study that tests all constructs in the one structural model.

Moreover, the empirical work of this study is believed to be the first to test the direct link between the co-creation experience and customers' perceptions of value-in-use. The findings extend the literature on customer value by providing evidence of customers' perceptions of value-in-use determined after their interaction via multichannel banking. Additionally, mixed results are found in the literature in terms of the role of commitment with respect to co-creation of

value, whether it is an outcome of co-creation, or an antecedent to it. This study has defined co-creation in terms of an experience, and value as value-in-use, where value follows co-creation; the findings suggest that commitment is a consequence of that co-creation experience.

Finally, the findings of the current study are the first to use profile deviation to empirically test and demonstrate that customers with high perceptions of the co-creation experience are statistically different from customers with a poorer perception of this experience, value-in-use and commitment. This finding contributes to S-D logic, which emphasises that customers who engage in co-creation, achieve increased specialised knowledge and skills, and have higher perceptions of value-in-use; thereby they seem to be happier and better equipped to maximise benefits.

#### ***7.4 Methodological contributions***

The current study contributes to the value co-creation literature in general, and to the S-D logic in particular, by developing and testing a parsimonious and practical three-dimensional scale of the co-creation experience. It does this in a multichannel banking context from the customer's perspective. This measure, which was initially based on the literature and qualitative findings, was then confirmed in a quantitative study. Moreover, the findings validated the scale developed to measure integration quality, as proposed by Sousa and Voss (2006).

In addition, the findings extend the literature on customer value perceptions by creating and confirming a scale to measure value-in-use in multichannel banking. This scale was found to consist of three dimensions: customer participation benefits, convenience value and religious value.

### ***7.5 Managerial implications***

The findings of the current study provide several implications for banking managers and decision makers. First of all, given that integration quality was found to be significant in influencing customers' banking experiences, an implication of this is that banks should initiate sophisticated and advanced technology to support the improvement of coordinated interfaces. Managers may wish to consider a separate department to support coordination among different banking channels and to emphasise providing consistent service and information to customers; i.e. ensuring coordination and consistency across channels in terms of service delivery, responding to customers' requests, following their inquiries and solving their complaints in a timely manner.

Second, although joint problem-solving was neither related to convenience value nor to commitment, every effort should be taken to avoid problems in the first place. The strategy of solving customers' problems must be proactive, taking into account all types of contact with customers regardless of their location. Managers must also monitor the process of solving customers' problems and the time spent to do this. The banks must also encourage customers to interact with them via different channels and to listen to customers so that they can improve service provision. Interacting with customers to solve their problems helps fix the problem in a shorter time. Banks may encourage customer collaboration by providing incentives (e.g. gift vouchers, fees exemptions). A live chat or call (e.g. Skype) with the bank assistance team is another possibility to provide accessible support to assist customers immediately when facing a problem. Although providing such services might be costly, investing in avoiding problems reduces the need for problem-solving.

Since building mutual relationships increases the customer's affective commitment, bank employees should have effective communication skills training to be able to understand customers' different needs, thus creating and maintaining existing customer relationships. For example, Study 1 found that

customers like personal interaction, so the bank employees could enhance this by calling their branch customers when they have not visited the branch for a long time. Additionally, branch employees should utilise a customer's physical proximity when they visit a branch to strengthen their personal relationship. Customers should be encouraged to talk, and through this dialogue employees can understand their current and future needs, and hence the relationship is improved and value is maximised.

Joint knowledge and learning can be interpreted as the most influential factor of co-creation because it is related to two dimensions of commitment (affective and continuance). Several implications were derived based on these findings. Banks must invest in educating and training frontline service employees with the required skills to help customers use channels more effectively. In fact, employees have to be trained to determine the level of help and education that the customer needs (Burton, 2002). For example, if the customer appears knowledgeable, then the employee can play the role of a guide to inform them about new offers or services. However, if the customer does not appear to understand the options or details of banking, the employee must use their judgement and spend enough time with the customer practically assisting them on how to use existing or newly installed channels or services.

To improve customers' knowledge and learning, the findings from the study suggest that banks need to provide instructions for utilising each banking channel or collaborate to enhance customers' skills. The bank website can provide opportunities to educate and inform customers in an efficient way. For instance, the website may contain an online library and/or database which contains information related to the stock market, investment opportunities and other banking subjects that might assist customers to utilise services and manage their own money. The bank website can also contain video links that help customers to better use products or services, or to instruct them in solving a problem. For example, real estate links and information could also be provided. The data also suggest that managers should increase the number of personal contacts via

different channels to support and educate customers (initiate online live interaction, communication campaigns, immediate answers to queries, branch advisers). Although applying these approaches to interaction requires extra resources, they are considered worthy, as customer knowledge and learning was the co-creation factor most strongly related to commitment.

The study provides a scale to measure customer co-creation in banking, which will enable managers to understand the degree of customers' willingness to cooperate with banks to take actions that assist their co-creation of service. Profile deviations showed that the top 10% of customers, in terms of scores, are different to the rest. Hence managers can seek to match new customers to the profile of these customers, and thereby aim to build strong co-creation opportunities.

## ***7.6 Limitations***

Similar to any research, the current project has several limitations. The qualitative study was limited in two ways. First of all, the researcher tried to explore the co-creation experience in the banking industry, in a socially and culturally different context, and to include all types of contact between the bank and customers. However, caution must be applied, as the findings might not be transferable to different contexts. Second, Hyman indicates (1945 as cited in Phillips & Clancy, 1975) that:

all scientific inquiry is subject to error, and it is far better to be aware of this, to study the sources in an attempt to reduce it, and to estimate the magnitude of such errors in our findings, than to be ignorant of the errors concealed in the data (p. 4).

With respect to errors, there are a large number of studies indicating that in social science research, respondents tend to give answers that they think interviewers, observers or laboratory experimenters want to hear, and what they expect them to say (Phillips & Clancy, 1975). Similar to much qualitative research, utilising

interviews as the data collection technique is associated with sources of bias such as social desirability, which means that interviewees might not express a personal and/or comprehensive view when answering the questions. This bias was reduced as much as possible by seeking information in a confidential manner and asking questions in various ways.

A number of caveats need to be noted regarding the quantitative phase of the current thesis. First of all, as mentioned before, the study was limited to banking customers in Saudi Arabia, and issues of generalisability of findings are among the limitations of the study. The findings cannot be claimed to represent a population outside this context. Moreover, as the study was limited to collect the data in the branches, the sample might not be representative because there might be a cluster of multichannel users that rarely visit branches. In addition, the banks did not disclose any information about their customer population, which hampered the ability to compare the sample to the population. Added to that, the study was limited to a sample where distinguishing between high and low intensity users of non-branch channels was not possible. These limitations pose constraints on the ability to make assumptions about generalisability of the findings.

Second, although every care was taken to generate many items to measure each construct, there might be potential issues that were not included. However, it is noteworthy that interviews were conducted until saturation was reached, suggesting that key items of interest were identified.

Third, translating the questionnaire from English to Arabic, led to the elimination of one item measuring integration quality. This occurred because, when the item was translated, the meaning of it became ambiguous to the Arabic respondents. Hence, the scale did not absolutely reflect the measure of Sousa and Voss (2006).

The design of the study is cross-sectional, and thus the results cannot establish cause and effect, but only correlational relations. Finally, the study was limited to retail banking customers (B2C), rather than corporate customers, and testing a different type of customer may yield different results. The study was also limited

to the banking industry and did not consider empirical testing on how customers co-create services in each banking channel separately.

The next section considers the findings and these limitations to identify avenues for future research.

### ***7.7 Future research***

The discussion of limitations and research implications has raised several issues in need of further investigation. First of all, the study investigated the developed scales in banking in Jeddah, Saudi Arabia, a developing country where much research needs to be carried out. This study has investigated banking customers' perception in a single area in Saudi Arabia, so future studies can build upon this study by replicating across samples from different areas in the country or in other countries of the Gulf area or the Middle East. Second, due to the fact that the study was limited to retail banking customers, further work needs to be done on different types of banking customers, such as corporate customers (B2B), and then a comparison can be made to investigate whether corporate customers are different in their perception of co-creation experience and whether or not they are different in their ways of co-creation with their banks. Third, since the scales to measure the co-creation experience and value-in-use were developed specifically to achieve the study's main goals, future research should test the scales in different industries and contexts to validate them. More specifically, the developed scale to measure co-creation experience and value-in-use should be further tested, as customer experiences are individualised (Gentile et al., 2007) and value is "experientially and contextually perceived and determined by the customer" (Grönroos, 2011, p. 293). In particular, special reference should be given to value in developing country. Finally, the study has investigated the factors supporting co-creation in banking, however, factors preventing customers from participating in co-creation activities have not been discussed in this research.

### ***7.8 Conclusion to chapter 7***

The final chapter provides a discussion of the main findings of the current project and its implications. Most importantly, a discussion of the theoretical and methodological contributions of the two studies was outlined. The outcomes of the project and suggestions for further research indicate that studies on co-creation, customer experiences and their responses provide a very worthy basis for on-going investigation.

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*Appendices:*

**Appendix A: Commitment dimensions measurement items**

<b>Variables names</b>	<b>Dimensions</b>	<b>Items</b>	<b>Sources</b>
Commitment	Affective commitment	Bank X has a great deal of personal meaning to me - I would be very happy to spend the rest of my life with Bank X - I feel a strong sense of belonging to Bank X	(Jones et al., 2010)
	Normative commitment	- I would not leave Bank X right now because I have a sense of obligation to Bank X - Even if it were to my advantage, I do not feel it would be right to leave Bank X right now - I would feel guilty if I left Bank X right now	(Jones et al., 2010)
	Continuance commitment	- Too much of my life would be disrupted if I decided to leave Bank X right now - I am not afraid of what might happen if I end my relationship with Bank X without having another lined up - Right now, staying with Bank X is a matter of necessity as much as desire - It would be very hard for me to leave Bank X right now, even if I wanted to	(Jones et al., 2010)

## **Appendix B: Interview questions**

The participants (Managers) will answer the following questions:

1. How do you perceive your bank's role in facilitating value for customers both online and offline? (What value do you think you give to your customers?)
2. How does the bank support customer-firm interaction?  
How does the bank enable active and personalised dialogue with customers?
3. How does the bank enable the customer to co-construct the service experience to suit her/his context?
4. How does the bank assist the customer to identify their problems?
5. How does the bank assist the customer in solving these problems?
6. How does the bank work on supporting and developing customer knowledge and skills?
7. How does the bank prioritise its resources (ICT, employee) to support customer-firm interaction?
8. In your view, what can create favourable customer experience?
9. What can create unfavourable customer experience?

The participants (banking customers) will answer the following questions:

1. How do you conduct your banking transactions?
2. How often do you use online banking?
3. How do you feel about it? And why?
4. Do you feel better when do the transaction yourself? Probing (Do you feel secure, convenient)
5. Describe your overall experience of online banking?
6. Describe your overall experience of offline interaction with the bank? And why?
7. Describe your experience of multichannel banking?
8. How does the overall interaction with the bank provide value to you?
9. How does the bank help you with your decision making?
10. How does the bank assist you in problem solving?
11. In your view, what might create favourable service experience in multichannel banking? And why?
12. What might create unfavourable service experience in multichannel context?  
And why?
13. How do you feel about your bank?

## **Appendix C: Invitation email**

### **E-mail invitation to participate in a PhD study**

Dear Customer,

This is an invitation to participate in an interview as part of my research that is being conducted by myself at **University of Newcastle**, Australia. The research investigates the relative strength of factors influencing customers' banking experience and the consequences of them on customer responses.

Participation in this interview is voluntary and anonymous. The interview should take about an hour to complete.

Find attached an **Explanatory statement** to give you a clear idea about the research basic aims and interview questions.

If you agree to participate, please send to us the suitable time and place for interview.

For any further information about your participation in this research please contact the researcher on:

Tel: + [REDACTED]

Email: [REDACTED]

Thanks

Ghada

## Appendix D: Information statement for Study 1

# Information Statement

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Assoc. Prof. Alison Dean  
Faculty of Business and Law  
Newcastle Business School  
Callaghan, NSW  
2308

T( [REDACTED]  
[REDACTED]

### Information Statement for the Research Project:

#### Interaction Experiences and Outcomes of Value Co-creation in Banking in Saudi Arabia

Document Version [2]; dated [18/10/2010]

You are invited to participate in the research project identified above which is being conducted by **Ghada T. Alhothali** from Newcastle Business School at the University of Newcastle.

The research is part of Ghada's PhD studies at the University of Newcastle, supervised by Assoc. Prof. Alison Dean from Newcastle Business School at Newcastle University.

#### *Why is the research being done?*

The purpose of the research is to identify factors that influence customers' feelings about the value of online and offline banking in Saudi Arabia. Understanding these factors enables banks to improve and optimise banking services. Recent literature demonstrates both the importance of exploring managers' perceptions of their firm's role in creating value for customers and customers' ability to better identify their needs and wants regarding the presented services. Thus, the present study aims to explore both these areas.

#### *Who can participate in the research?*

The present study seeks information from two groups: managers and banking customers. The sample of managers includes executive, IT and marketing

managers whereas the sample of customers targets banking customers who have recently used online banking in Saudi Arabia. Exclusion involves persons under 18 or those who have never used online banking.

**Managers:** A representative in the bank who feels you will be able to contribute has identified you.

**Customers:** A representative of the bank selected your name randomly from the bank database. The researcher will not have access to any lists or names.

***What choice do you have?***

Participation in this research is entirely your choice. Only those people who give their informed consent will be included in the project. Whether or not you decide to participate, your decision will not disadvantage you.

If you do decide to participate, you may withdraw from the project at any time without giving a reason and have the option of withdrawing any data which identifies you.

***What would you be asked to do?***

Participate in a face to face recorded interview. The interview will be about your view as a manager on how to help customers create value for themselves. Options for time and place will be assigned to you.

***How much time will it take?***

The interview is of approximately one hour in length.

***What are the risks and benefits of participating?***

There are no known risks to participants. Participation will provide data that should inform the bank about its online and offline services and ultimately improve outcomes for customers.

***How will your privacy be protected?***

Any information collected by the researcher and her supervisor, which might identify you, will be stored securely and only accessed by the researcher.

Hard data will be stored in a locked cabinet of the student researcher in SRS 205. On completion of the PhD, data will then be stored with the supervisor in room SRS 116 at the University of Newcastle. Electronic data will only be accessible by the student researcher and her supervisor and will be destroyed 5 years after completion of project. Once the interviews conducted, names will be replaced by letters (A, B...). Data will be aggregated and used only in summary form.

***How will the information collected be used?***

Information collected will be reported in thesis, academic papers and possibly conferences. Interviews will be audio taped and transcribed. You will be offered the opportunity to review the transcription.

The bank will be provided with a brief confidential report. Customers will be offered a summary report of customer's views.

***What do you need to do to participate?***

Please read this Information Statement and be sure you understand its contents before you consent to participate. If there is anything you do not understand, or you have questions, contact the researcher. If you would like to participate, please contact the researcher directly by e-mail ( [REDACTED] ) or phone (+ [REDACTED] ).

***Further information***

If you would like further information please contact:

**Assoc. Prof. Alison Dean**  
Faculty of Business and Law  
Newcastle Business School  
T( [REDACTED] )

**Ghada Alhothali**  
Faculty of Business and Law  
Newcastle Business School  
T( [REDACTED] )

[REDACTED]

Thank you for considering this invitation.

**Signature**

**Assoc. Prof. Alison Dean**

Chief Investigator  
Project Supervisor

**Ghada T. Alhothali**

PhD student

***Complaints about this research***

This project has been approved by the University's Human Research Ethics Committee, Approval No. H- **2010-1225**

Should you have concerns about your rights as a participant in this research, or you have a complaint about the manner in which the research is conducted, it may be given to the researcher, or, if an independent person is preferred, to the Human Research Ethics Officer, Research Office, The Chancellery, The University of Newcastle, University Drive, Callaghan NSW 2308, Australia, telephone (02) 49216333, email Human-Ethics@newcastle.edu.au.

## Appendix E: Consent form for Study 1

# Consent Form

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**Assoc. Prof. Alison Dean**  
Faculty of Business and Law  
Newcastle Business School  
Callaghan, NSW  
2308  
T( [REDACTED]  
[REDACTED]

### Consent Form for the Research Project:

#### Interaction Experiences and Outcomes of Value Co-creation in Banking in Saudi Arabia

Document Version [2]; dated [18/10/2010]

I agree to participate in the above research project and give my consent freely.  
I understand that the project will be conducted as described in the Information Statement, a copy of which I have retained.  
I understand I can withdraw from the project at any time and do not have to give any reason for withdrawing.

I consent to participate in an interview and having it recorded.  
I understand that I can review and edit the recording of my interview.

I understand that my personal information will remain confidential to the researchers.

I have had the opportunity to have questions answered to my satisfaction.

Print Name:

Signature:

Date: \_\_\_\_\_

## Appendix F: Questionnaire for Study 2

### Dear Participants,

I am **Ghada Talat Alhothali**, a PhD student at Monash University, Australia, under the supervision of **Professor Steve Worthington**. I am currently working on a study to understand customers' experiences in Saudi Arabia with multiple banking channels (i.e. Internet banking, branches, phone banking, ATMs). My main purpose is to examine factors that influence your interaction experiences and the relative importance of these factors to you. The banking industry has been selected as the context of the study because:

- Banking is an essential part of our everyday life
- Banking organisations provide you with different channels (ways of interacting) i.e. Online banking, branches, phone banking, ATMs

I would appreciate your participation in my study as the outcomes of this study will enable me to complete my doctorate degree and also enable your bank to understand your views and concerns about using multiple channels.

### Survey Instructions:

- Please note that your participation in this questionnaire is entirely voluntary.
- Please be assured that your responses will remain anonymous.
- Please make sure that you answer all the questions even if some of them are quite similar.
- Please be honest; accuracy is important for the success of the study.
- There are no right or wrong answers. We are only interested in your experience with the various channels of banking.
- If you have more than one bank to deal with, please refer to one bank of your choice to reflect your banking experience.

Thank you for helping me with my research

Ghada

**Section A: Your use and satisfaction with multiple banking channels**

Please circle one of the following options to indicate **how frequently you use** each of the channels for your banking:

Please note that the numbers 1 to 7 represent the responses as shown below

	Never	Rarely	Occasionally	Sometimes	Often	Very often	Always
1 Branch (visiting the bank)	1	2	3	4	5	6	7
2 ATM*	1	2	3	4	5	6	7
3 Internet banking using a computer	1	2	3	4	5	6	7
4 Internet banking using a mobile device (e.g. Iphone or Ipad)	1	2	3	4	5	6	7
5 Phone banking (ringing the bank)	1	2	3	4	5	6	7

\* Automatic teller machine

Please circle one of the following options to rate **your degree of satisfaction** with multiple banking channels

	Very dissatisfied	Dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Satisfied	Very satisfied
1 Branch (visiting the bank)	1	2	3	4	5	6	7
2 ATM*	1	2	3	4	5	6	7
3 Internet banking using a computer device	1	2	3	4	5	6	7
4 Internet banking using a mobile device (e.g. Iphone or Ipad)	1	2	3	4	5	6	7
5 Phone banking	1	2	3	4	5	6	7

\* Automatic teller machine

**Section B: Your feelings about multiple banking channels**

Please circle one of the following options to indicate the extent to which **you agree** with each of the following statements.

<b>About your bank</b>	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1 My bank enables me to choose between alternative channels for a given service	1	2	3	4	5	6	7
2 My bank enables me to accomplish my transactions by simply using one channel	1	2	3	4	5	6	7
3 My bank makes me aware of all channels and the services available through them	1	2	3	4	5	6	7
4 My bank makes me aware of the price implications, if any, of using different channels	1	2	3	4	5	6	7
5 I am confident that I can receive the same response to my query regardless of the channel I use	1	2	3	4	5	6	7
6 I am confident that the service provided to me through one channel takes into account my previous interactions through other channels	1	2	3	4	5	6	7

**Section C: features you value in multiple banking channels**

Please circle one of the following options to indicate the extent to which **you agree with** each of the following statements.

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly Agree
1 I value being able to conduct my banking via alternative banking channels	1	2	3	4	5	6	7
2 I value using alternative banking channels because they enable me to do my banking whenever is convenient to me (i.e. I can access services 24 hours a day)	1	2	3	4	5	6	7
3 I value using alternative channels because they enable me to do my banking wherever it is convenient to me (i.e. I can access services regardless of my location)	1	2	3	4	5	6	7
4 I value having one of the physical channels (e.g. a branch or ATM) near my work or home	1	2	3	4	5	6	7
5 Some of my transactions are time bound, so I value quick responses to my requests	1	2	3	4	5	6	7
6 I value the bank adding new services to alternative channels	1	2	3	4	5	6	7

7 I value the bank sending confirmation messages to me after conducting my transactions	1	2	3	4	5	6	7
8 Compared to transactions done by bank personnel, I value the opportunity to do transactions myself	1	2	3	4	5	6	7
9 I value the ease of retrieving past transactions (e.g. hard or soft copies of statements)	1	2	3	4	5	6	7
10 When seeking live interaction with the bank employees, I value the opportunity to use different channels (branch, phone, internet chat/email)	1	2	3	4	5	6	7
11 I value my bank more when it provides me with products that satisfy my religious concerns (e.g. non-usury products)	1	2	3	4	5	6	7
12 I value the opportunity that alternative channels provide for me to pay my charity contributions	1	2	3	4	5	6	7
13 I value my bank more when it considers my religion in the way that it operates	1	2	3	4	5	6	7
14 I value my bank more when it supports community and charity activities	1	2	3	4	5	6	7

**Section D: Your feelings about joint problem-solving**

First in this section, I want you to compare the bank’s service to you on problem-solving, with your response to this service.

Please think about **your bank’s approach to problem-solving**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1 My bank shows its willingness to cooperate with me to solve my problems	1	2	3	4	5	6	7
2 My bank provides me with various channels to report my problems easily	1	2	3	4	5	6	7
3 My bank confirms that my problem has been acknowledged and it is in the progress of being solved	1	2	3	4	5	6	7
4 My bank is able to provide solutions to my problems regardless of my location	1	2	3	4	5	6	7
5 My bank responds promptly to my problems whenever I ask for assistance	1	2	3	4	5	6	7
6 My bank provides various channels for me to deliver my feedback on the quality of their service	1	2	3	4	5	6	7

Now please think about **your response to the bank's approach to problem-solving**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
7 I am willing to cooperate with my bank to solve problems that may arise	1	2	3	4	5	6	7
8 I am able to report my problems easily via different channels	1	2	3	4	5	6	7
9 Whenever I report a problem, I can monitor the progress of my request	1	2	3	4	5	6	7
10 I am prepared to take action to get my problems solved wherever I am in the world	1	2	3	4	5	6	7
11 I am prepared to take action so that the bank can give me a prompt response to my problems	1	2	3	4	5	6	7
12 I am willing to deliver my feedback on the quality of the bank's service via various channels	1	2	3	4	5	6	7

**Section E: Your feelings about joint relationship development**

In this section, I want you to compare the bank’s approach to relationship development, with your response to that approach

Firstly please think about **your bank’s approach to relationship development**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1 Employees of my bank are willing to develop a personal relationship with me	1	2	3	4	5	6	7
2 Employees of my bank strongly care about me	1	2	3	4	5	6	7
3 Employees of my bank seek to maintain a relationship with me	1	2	3	4	5	6	7

Now please think about your **attitude to relationship development** with your bank

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
4 I am willing to develop a personal relationship with the bank's employees	1	2	3	4	5	6	7
5 I strongly care about the employees of my bank	1	2	3	4	5	6	7
6 I am willing to maintain a relationship with the employees of my bank	1	2	3	4	5	6	7

**Section F: Your feelings about joint knowledge and skills development**

In this section, I want you to compare the bank’s approach to increasing your knowledge and your response to that approach  
 Firstly please think about **your bank’s approach to increasing your knowledge and skills**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1 My bank provides information in each channel that teaches me how to use that channel	1	2	3	4	5	6	7
2 My bank assigns an employee to help me use different channels more effectively	1	2	3	4	5	6	7
3 My bank initiates seminars/workshops to increase my knowledge about the best way of using their services	1	2	3	4	5	6	7
4 My bank helps me to develop knowledge and skills so that I can access information needed via different channels	1	2	3	4	5	6	7
5 My bank, through different channels, keeps me updated with changes in their services	1	2	3	4	5	6	7

Now please think about **your response to your bank’s approach to increasing your knowledge and skills**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
6 I am willing to access information in each channel to learn how to use the channel	1	2	3	4	5	6	7
7 I am prepared to interact with bank employees to help me to use different channels more effectively	1	2	3	4	5	6	7
8 I am prepared to accept my bank’s invitation to attend seminars/workshops to increase my knowledge about using their services	1	2	3	4	5	6	7
9 I am prepared to develop my knowledge and skills so that I can access information needed via different channels	1	2	3	4	5	6	7
10 I use different channels to keep myself updated with changes in the bank’s services	1	2	3	4	5	6	7

**Section G: Your feelings of loyalty to your bank**

Please now tell me about your **feelings and intentions** with respect to your bank

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1 I would be very happy to spend the rest of my life as a customer of my bank	1	2	3	4	5	6	7
2 I feel a strong sense of belonging to my bank	1	2	3	4	5	6	7
3 I would not leave my bank right now because I have a sense of obligation to it	1	2	3	4	5	6	7
4 My bank has a great deal of personal meaning to me	1	2	3	4	5	6	7
5 Even if it were to my advantage, I do not feel it would be right to leave my bank right now	1	2	3	4	5	6	7
6 I would feel guilty if I left my bank right now	1	2	3	4	5	6	7
7 Too much of my life would be disrupted if I decided to leave my bank right now	1	2	3	4	5	6	7
8 I am afraid of what might happen if I end my relationship with my bank without having another bank lined up	1	2	3	4	5	6	7
9 Right now, staying with my bank is a matter of necessity to me	1	2	3	4	5	6	7
10 It would be very hard for me to leave my bank right now, even if I wanted to	1	2	3	4	5	6	7

**Section H:**

**Demographics and General Information**

The following statements will be used for categorization purposes. Please complete with an X in the appropriate box.

1. **Age** 18 to 24  25 to 34  35 to 44  45 to 54  55 and above
2. **Gender** Male  Female
3. **Education** High school  Undergraduate  Graduate  Postgraduate
4. **Monthly Income/ Saudi Riyals**  
1000-5000  5001-10000  10001-15000  20000 - above

Thank you for your participation in completing this questionnaire. Would you please hand the questionnaire to the person who gave it to you or drop it in the designated box which is located in your bank branch.

## Appendix G: Information statement for Study 2



**MONASH** University



GROUP OF EIGHT

### **Department of Marketing**

Faculty of Business and Economics

### **Title: Customers' Experiences with multiple banking channels in Saudi Arabia**

My name is **Ghada Talat Alhothali** and I am conducting a research project as part of my PhD, under the supervision of **Steve Worthington**, a Professor in the Department of Marketing at Monash University. This means that I will be writing a PhD thesis which is the equivalent of a 300 page book. I am inviting you to participate in my study. Please read this Explanatory Statement in full before making a decision about whether or not you want to accept my invitation.

The present study seeks information from a group of banking customers who are users of multiple banking channels (i.e. Online banking, phone banking, ATMs, branches). It will not involve persons under 18 or those who have never used banking channels before.

**Customers:** A representative of the bank selected your name randomly from the bank database. I will not have access to your name or other personal details.

### **The aim/purpose of the research**

The aim of this study is to investigate factors influencing your experience. Understanding these factors may enable banks in Saudi Arabia to improve their banking services.

### **Possible benefits**

If you agree to participate, there is no direct benefit to you, but your participation will provide data that could inform the bank about their ability to increase value to you through their multiple channels and ultimately improve outcomes for you as a customer.

### **What does the research involve?**

The study involves questionnaire you complete.

### **How much time will the research take?**

The questionnaire should take no more than 20 minutes to complete.

**Inconvenience/discomfort**

There are no known risks related to your participation in the survey.

**Can I withdraw from the research?**

Taking part in this study is voluntary and you are under no obligation to consent to participate. You may withdraw from further participation at any stage prior to submitting the questionnaire.

**Confidentiality**

Your responses will be anonymous as there is no identification about your identity in any part of the questionnaire.

**Storage of data**

Data collected will be stored in accordance with Monash University regulations, kept on University premises, in a locked filing cabinet for 5 years. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

**Use of data for other purposes**

Anonymous data collected will be reported in my thesis, academic papers, conference presentations and possibly a report to the bank, but individual participants will not be identifiable in any of these reports.

<p>If you would like to contact the researchers about any aspect of this study, please contact the Chief Investigator:</p>	<p>If you have a complaint concerning the manner in which this research "<b>Customers' Experiences with multiple banking channels in Saudi Arabia</b>" is being conducted, please contact:</p>
<p><b>Prof. Steve Worthington</b>          Department of Marketing          Faculty of Business and Economics</p> <p>Tel: [REDACTED]          Fax: [REDACTED]          Email: [REDACTED]</p> <p>Thank you          Ghada</p>	<p><b>Local Contact at Saudi Arabia :</b></p> <p>Name: Madawi Allam          Mobile: [REDACTED]          Email: [REDACTED]</p>