Measuring Quality of Online Business-to-Business Relationships: SMEs and the Jordanian Banking Sector

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Abstract
The purpose of this paper is to explore how the technology acceptance model can be used as an alternative approach to the study of online relationship marketing quality in business-to-business relationships. The academic literature review offers an understanding of how marketing relationship quality can be measured. There is dearth of research in the area of measuring online business-to-business relationships. The originality of this paper comes from examining online relationships between banks and small and medium enterprise (SMEs) in an emerging economy, where SMEs in Jordan are both consumers of financial service offered by Banks, and prospective partners working with the Bank to benefit both parties. An understanding of the factors affecting the decision to adopt internet technology and how this adoption can affect the quality of the overall SME-Bank relationship is discussed in this paper. An extensive review of the normative literature on both relationship marketing and TAM, provides a unique perspective for exploring the quality of marketing relationships in an internet context using TAM.

Keywords: Business Relationship marketing; Technology Acceptance Model; Internet; Banking sector.

1 INTRODUCTION

It has been argued that for businesses competing in the new millennium without internet-enabled capabilities will be similar to trying to compete today without a sales force or a telephone (Ramsey and McCole, 2005). There has been some debate about the limited knowledge available concerning the adoption of information and communication technologies by SMEs (Shiels et al., 2003). Over the past few years, the relationship between SMEs and information and communication technologies has begun to be explored in a greater depth (Shiels et al., 2003). These studies resulted in some authors calling for an established criteria for measuring the use of internet-based electronic commerce (Kaynak et al., 2005).

Most SME’s are not able to adapt transaction marketing techniques due to their limited customer base, restricted marketing ability and the lack of formalised planning (Zontanos and Anderson, 2004). Relationship marketing offers one alternative that is heavily influenced by the advancements in the Internet and information technology (Sheth, 2002). Internet-based relationships seem to be sufficiently different from traditional relationships; something that
requires specialized management attention (Colgate et al., 2005). Furthermore, adoption of e-business by SMEs varies by type of industry. Public, education and charitable sectors were found to have the lowest adoption rates, while professional services sector had very high adoption levels (Koh and Maguire, 2004).

The paper is structured as follows: the first part will present the background by contextualising the study of online business-to-business relationships in Jordan, between banks and SMEs. The literature review of internet adoption; the quality of business-to-business relationships; and how relationships between business partners may be influenced by internet adoption, will be summarised. A revision of how relationship quality has been previously conceptualized will be provided and the paper will discuss and assess dimensions of the relationship-quality that are more applicable to online business-to-business relationships. Finally, a high level conceptual model that links internet adoption factors and their impact on the overall quality of marketing relationships will be developed with recommendations for further investigation and development.

2 BACKGROUND: JORDANIAN SME - BANK RELATIONSHIP

Inefficient financial markets are a characteristic of many transitional and emerging countries. Typically, the lack of availability of equity and credits affects mainly SMEs as well as micro enterprises (Pohl Consulting & Associates, 2007). World demand for external financing and venture capital amongst new and growing SMEs increased noticeably over the past ten years. Current estimates show that 99% of the Jordanian economy is made up of SMEs and it is increasingly difficult for them to stay within the constraints of self-financing (Jordanian Ministry of Planning & International Cooperation, 2007). Therefore, SMEs need to struggle for capital from external sources. Consequently, Jordanian SMEs cannot realise their growth potential due to the insufficient access to external financing and lack of financial services (Jordan Ahli Bank, 2007).

Banks worldwide play a critical role in creating a basic level of access to capital for businesses. The Jordanian banking sector is traditionally reluctant to lend to SMEs for the financing of new investment because of a perceived lack of collateral. This concern has been addressed by setting up a loan guarantee scheme (EJADA, 2007). Yet, access to finance in Jordan remains underdeveloped. Loans, when available, are expensive for businesses and so the cost of capital is high. As stated by one expert the biggest problem is the banking sector's inability to do “project-based lending” (Jordanian Ministry of Planning & International Cooperation, 2007).

SMEs require a completely different approach than corporate lending which Commercial Banks in the Arab world, to a large extent, are more involved in (Small & Medium Enterprises Center, 2007). Many banks in Jordan are recognizing the profitability of lending to small and medium enterprises and taking steps to build their SME banking business. In a symposium for Jordanian bankers, participating institutions agreed to pay closer attention to financing SMEs. They developed a time-tested best practices blueprint for SME banking, but major omissions include the fact that this blue print does not address systemic issues, changes to the socioeconomic and regulatory infrastructure. The Planning and International Cooperation Minister, Suhair Al-Ali, who addressed the symposium, stressed that more attention must be paid to the SMEs sector in order to ensure sustainable development of the national economy and create more jobs for citizens (The Jordan Times, 2005).
Consequently, the relationship between Jordanian SMEs and Banks is very important and distinct. SMEs are a unique segment with great potential. They need tailored and focused attention from banks. The fact that they account for a considerable percentage of the total number of companies makes them very important especially to the Jordanian economy.

3 INTERNET ADOPTION

Adoption and implementation of new technologies is essential to the survival and growth of the small business sector (Martin and Matlay, 2001). The main incentives behind the adoption of technology relate to: the lower costs and lower risks involved; the improved relationships with customers and suppliers; and the increased control over distribution and marketing of products (Fillis et al., 2003). The commitment of senior management is a well known driving force in the adoption and exploitation of technology, through the creation of senior management technology champions within the organisation (Shiels et al., 2003).

In a review of the literature, Ramsey and McCole (2005) identified five major factors that were found to affect the “early” adoption of new technologies including: negative mindsets regarding the technological/regulatory environment; the nature of the service; staff development/human resource issues; market-orientation; and the macro-environment. In the case of e-commerce adoption, SMEs are adopting it as a defensive reaction in order not to lose their competitive position and “not to be left behind” (Wagner et al., 2003). Other factors driving the adoption of e-commerce include: attracting new customers; improving knowledge sharing among employees within the firm; improving the service offered to existing customers, while reducing or maintaining the cost of that service and the improved supply of goods, services and information to the firm. The intention to use e-commerce to recruit staff was found not to be a major driver of e-commerce adoption (Daniel and Wilson, 2002).

The adoption of technology by the banking sector is particularly important. The key reasons observed in the literature for banks moving to an online model, are mainly cost savings for banks through improved efficiencies and digitisation of services, rather than delivery of physical services; and through and the move to a customised and personalised self-service model which reduces time and effort of the traditional branch banking (Jaruwachirathanakul and Fink, 2005). Kolodinsky et al. (2004) found that factors affecting the adoption of e-banking included: relative advantage (convenience), compatibility, simplicity, and observability which are consistent with the factors of improving efficiencies, customisation and personalisation. According to Doherty et al. (2003), organizational and technological factors are more important than environmental factors in the adoption of the internet.

It has been suggested that SMEs’ adoption of internet technologies follow a sequence of stages (Saaksjarvi, 2003) in line with the Stages of growth model which describes the evolution of information technology in organisations, first introduced by Nolan (1979). The early stages of internet adoption are typically characterised by gaining access to the internet followed by using relatively simple technologies (e.g. e-mail), while in the most mature stages the company website is fully integrated with the various back office systems such as enterprise resource planning (ERP), customer relationship management (CRM), and integrated supply chain management (SCM) applications (Mendo and Fitzgerald, 2005). In order to understand the adoption of the internet in more detail, the technology acceptance model will be used here as a foundation for developing the model to represent online business-to-business relationships.
4 TECHNOLOGY ACCEPTANCE MODEL

The technology acceptance model (TAM) was one of a number of studies that have helped in providing theoretical frameworks for research in the adoption of information technology and information systems over the last two decades. TAM has been used extensively as the basis of a range of empirical studies. As a result of several applications and replications it is believed that TAM is one of the most well-established, robust, parsimonious, and influential in explaining IT/IS adoption behaviour and consistently explains a substantial proportion of the variance in usage intentions and behaviour (Lu et al., 2003, McKechnie et al., 2006, Lymeropoulos and Chaniotakis, 2005).

TAM has its roots in the theory of reasoned action (TRA) which explains individuals' behaviour on the basis of factors such as beliefs and intentions (Ortega et al., 2006). Because TRA is very general and can virtually explain any human behaviour, Davis introduced TAM as an adaptation of TRA, specifically designed to explain computer usage behaviour in organisations. TAM hypothesizes that two particular beliefs are of primary relevance to computer acceptance behaviour; namely perceived ease of use (PEOU) and perceived usefulness (PU) (Davis et al., 1989). TAM has strong behavioural elements, assuming that individuals are free to act without limitation when they form their intention to act, these formed intentions will then be realised as actions. Davis (1989) defined “perceived usefulness” as “the degree to which a person believes that using a particular system would enhance his or her job performance”, and perceived “ease of use” as “the degree to which a person believes that using a particular system would be free of effort”. Moreover, “attitude” can be understood in terms of an individual's feelings or emotions about using the technology, whereas “intention to use” was understood in terms of the likelihood that an individual would use the technology in the future (Lymeropoulos and Chaniotakis, 2005).

Many constraints can be faced in the real world, such as limited ability, time constraints, environmental or organizational limits, or unconscious habits which will limit the freedom to act (Bagozzi et al., 1992). The process of modelling PEOU and PU as distinct constructs allows researchers to better trace influences of all of the affecting factors on information systems acceptance (Pikkarainen et al., 2004, Davis, 1989). The greater the perceived usefulness and the perceived ease of use, the better are people's reactions towards the innovation and the higher their intention to adopt it (Hernandez and Mazzon, 2007). According to TAM, perceived usefulness (PU) and perceived ease of use (PEOU) pressure an individual's behavioural intention to use a system, which determines actual use (Schaupp and Carter, 2005).

Extant research has tended to examine user acceptance of the internet in various contexts mainly as a dichotomy (adoption/non-adoption), thus ignoring the process underlying adoption (McKechnie et al., 2006). This paper aims to provide insights into factors determining factors impacting adoption of the internet by SMEs and how this relates to the quality of online relationships.

5 RELATIONSHIP QUALITY

Relationship quality arose from theory and research in the field of relationship marketing (Crosby et al., 1990, Dwyer et al., 1987) in which the ultimate goal is to strengthen already strong relationships and to convert indifferent customers into loyal ones (Berry and
Parasuraman, 1991). The two main ideas in understanding relationship quality are: a) relationship quality as a multi-dimensional higher-construct (Woo and Ennew, 2004) that comprises several distinct but related components or dimensions (Rauyruen and Miller, 2007); b) definition and operationalisation of relationship quality differs from one research project to another depending on the research context specific.

Crosby et al. (1990) were among the earliest to identify and empirically examine dimensions of relationship quality. They suggested that relationship quality comprises at least two dimensions: trust in the salesperson and satisfaction with the salesperson. Their work was criticised based on the generalisability of their approach since it is predominately based on customer-company relationships in a certain industry sector where reduction of customer uncertainty is the main goal (Hennig-Thurau, 2000).

In order to understand relationship quality, it is necessary to think about both definitions of the aggregate construct and assessment of the dimensions that make up the construct (Wong and Sohal, 2002). Trust and commitment have been widely discussed in the literature (Hennig-Thurau and Klee, 1997). Commitment – trust theory was one the first theories developed in this context, it draws on the political economy paradigm and was developed by (Morgan and Hunt, 1994). Commitment and trust promote efficiency, productivity, and effectiveness which lead directly to cooperative behaviours that are advantageous to relationship marketing success (Morgan and Hunt, 1994).

Customer loyalty and (positive) communication by customer word-of-mouth are two key relationship marketing outcomes (Hennig-Thurau et al., 2002). The development of close social relationships ultimately approach what is known as "psychological loyalty", which seems contrary to self-interest (Durkin and Howcroft, 2003b). Rosen and Surprenant (1998) suggest that most studies adopt one or the other of the two primary outcome measures of relationships: satisfaction and quality without any discussion of the justification for the choice.

Past studies have shown strong empirical support for using dimensions of commitment, trust, satisfaction, and loyalty to measure relationship quality. A number of empirical studies have found that relationship quality comprised commitment, satisfaction, benevolence, and trust (Bennett and Barkensjö, 2003; Roberts et al., 2003, Ulaga and Eggert, 2006; Rauyruen and Miller, 2007). Furthermore, these dimensions have also been previously empirically tested and have proved to have predictive validity (Colgate and Smith, 2005b).

There are two types of relationship exchange processes that can be identified using different terms such as technical and social elements or structural and social bonds. Rao and Perry (2003) consider the frequently used measures of quality, such as trust and commitment to be social bonds and that there are the important kinds of bonds which they identify as structural bonds, which involve economic or technological elements between firms and could include coordination and interdependency. The internet may influence both types of bonds in a relationship.

Building on past research, this paper proposes that relationship quality comprises of at least three different but related social dimensions, which are: trust, commitment and satisfaction. This selection is based on the literature and is considered to be suitable in the context of markets in a business-to-business environment. These dimensions are the essential constructs in order to describe relationship quality from the customer's point of view in a business-to-business context (Walter et al., 2003a).
However, much of the literature has tended to focus on studying the social bonds in a relationship. Some others have identified links between social bonds and technical bonds. Perry et al. (2002) stresses that social bonds are not more important than technical bonds and so do not deserve to be researched apart from technical bonds. Social bonds are “investments of time and energy that produce positive interpersonal relationships between the partners”, while technical bonds are built when two companies adapt to each other in some economic or structural way (Wilson and Mummelaneni, 1986). The internet may be able to influence both types of bonds in a relationship (Rao and Perry, 2003). Based on the work of Berry and Parasuraman, (1991) and according to Harrison-Walker and Neeley, (2004), relationship marketing can be practiced on one of three levels depending on the type and number of bonds that a company uses to foster loyalty.

- Level one is characterized by financial bonds and relies on pricing incentives to develop customer loyalty. These are implemented by offering price discounts or reductions to the customer and they serve to lower the ‘cost’ for the customer.

- Level two is characterized by social and financial bonds and emphasizes personal service, staying in touch, learning about wants and needs, and customizing the relationship in response.

- Level three adds structural bonds are added to the mix and involves providing services that are valuable and not readily available from other sources.

A taxonomy of the different levels of relationship quality bonds, their constructs and their empirical literary source is summarised in table 1. The literature is categorised according to the three levels created and the main factors researched in each of the studies. In this paper, we have incorporated TAM with the three different levels of relationship quality bonds to develop a high level conceptual model.
<table>
<thead>
<tr>
<th>Type of Bond</th>
<th>Sub – constructs</th>
<th>Studies that used some of the Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Bonds</td>
<td>Investments, Profit, Value</td>
<td>(Wilson and Jantrania, 1996), (Naude and Buttle, 2000), (Keating et al., 2003), (Ulaga and Eggert, 2006)</td>
</tr>
<tr>
<td>Social Bonds</td>
<td>Satisfaction, Trust, Commitment, Conflict, Loyalty, Benevolence, Advocacy, Consideration, Understanding, Culture, Ethical profile, Opportunism, sense of unity, Identification</td>
<td>(Crosby et al., 1990), (Lagace et al., 1991), (Dorsch et al., 1998), (Rosen and Surprenant, 1998), (Shamdasani and Balakrishnan, 2000), (Hennig-Thurau et al., 2002), (Lang and Colgate, 2003), (Walter et al., 2003b), (Colgate and Smith, 2005a), (Lages et al., 2005), (Farrelly and Quester, 2005), (Grégoire and Fisher, 2006), (Leonidou et al., 2006), (Ulaga and Eggert, 2006), (Rauyruen and Miller, 2007)</td>
</tr>
<tr>
<td>Structural Bonds</td>
<td>Coordination, Communication, Power, Adaptation, Collaboration, Flexibility, Responsiveness, Orientation, Compatibility, Perceived quality, Anticipation, Atmosphere, Presentation</td>
<td>(Wilson and Jantrania, 1996), (Huntley, 1998), (Hopkinson and Hogarth-Scott, 1999), (Keating et al., 2003), (Bürca et al., 2004), (Woo and Ennew, 2004), (Lages et al., 2005), (Fynes et al., 2005), (Leonidou et al., 2006)</td>
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6 A MODEL FOR INTERNET ADOPTION EFFECTS ON RELATIONSHIP QUALITY

The interactive exchange of information and the content, quality and speed of responses which are provided by the internet can be a source of competitive advantage (Beech et al., 2000). The ability of the internet to ease interaction and communication has led it to be accepted as a medium for managing relationships (Colgate and Smith, 2005b). The communication associated with a relationship allows information about the consumer to be collected and used to customise the relationship's offerings (Colgate and Smith, 2005b). A key attraction of the internet in this relational role is the level of interactivity that can exist between a buyer and a seller (Durkin and Howcroft, 2003a). Thus, building a strong Website adds value for consumers and firms, through the generation of loyal consumers (Page and Lepkowska-White, 2002).

The internet has evolved into a new medium for communicating and interacting with customers opening up a "market space" that is shared; real-time; global; and accessible (Heinen, 1996; Arnott and Bridgewater, 2002). The internet contributes the main benefits of convenience, comfort and instant satisfaction (Trim, 2002) all of which are critical factors in relationship building. A number of characteristics have enabled the internet to have a
profound impact on marketing communications, namely: constant ubiquity, global availability and efficient transfer of information; interactivity; individuality/personalisation; and integration of communication and transaction (Bauer et al., 2002, Rowley, 2004)

Assessment of the technology impact on relationship marketing has largely been restricted to the field of industrial marketing (McGowan et al., 2001). The internet can be used effectively in a B2B marketing context to facilitate interactive real-time communications and transactions (Rao and Perry, 2003). For instance, purchasing goods and services; buying information and consulting services; submitting requests for proposals and receiving proposals. Business buyers can use internet-based technologies to gather information about available products and services with relatively low transaction costs, evaluate and negotiate with suppliers, implement order fulfilment over communication links and access post-sales services.

Building on a synthesis of the literature already reviewed in this paper, a model for exploring the relationship between internet adoption by Banks and the affect of this adoption on the quality of the relationship with their SME customers is developed and illustrated in figure 1.

In this instance, we are intending to extend TAM through the refinement of the external variables. Aguila-Obra and Padilla-Meléndez, (2006) were able to identify the common external factors relating to internet adoption in the literature, these include: pressure from competitors, customers or suppliers; the role of government (incentives); partners’ alliances; technological infrastructure; technology; consultants; image of Internet technology; and users’ expectations. Factors such as these, as well as cultural aspects, will be explored in more detail as to determine their impact on the adoption of technology in Jordanian SMEs and how relationship between business entities and banks are being adapted and developed. Thus, this paper posits that the model in figure 1 fits the stakeholders in the Jordanian online markets. Furthermore, because of the benefits already identified above, banks in Jordan are more keen than any other sector to move further online with their business customers. This environment therefore would be an ideal place to test this model.

Figure (1)

![Diagram](image_url)

Adapted from (Davis, 1989) –
7 CONCLUSION

Nearly all of the Jordanian economy is made up of SMEs, and there is a serious problem which such enterprises face in terms of continuing to finance their businesses. It is essential therefore to understand the kinds of relationships that are necessary and the quality of the relationship needed to advance and mature the role banking plays in the growth and development of SMEs which in turn will be reflected in the health of the country’s economy as a whole.

This paper identified a linkage between the concepts of relationship quality and internet technology adoption. Further research is currently ongoing to collect empirical data that will validate the developed model. The empirical data will involve a qualitative stage which will clarify the external variables and social, financial and technical bonds in the context of the Jordanian banking and SME section. Further quantitative data collection will also be required to express the relationships between the constructs identified in more detail. This paper is the first stage towards understanding this unique relationship.

References


