

Spring 3-27-2012

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Recommended Citation

Ahmad, Abid; Philpott, Elly; and Duan, Yanqing, "Developing A Conceptual Framework For Factors Affecting Active Participation In Business To Business Online Business Communities" (2012). *UK Academy for Information Systems Conference Proceedings 2012*. 39.
<http://aisel.aisnet.org/ukais2012/39>

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DEVELOPING A CONCEPTUAL FRAMEWORK FOR FACTORS AFFECTING ACTIVE PARTICIPATION IN BUSINESS TO BUSINESS ONLINE BUSINESS COMMUNITIES

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Abstract

The primary purpose of this paper is to provide better understanding of the factors affecting active participation in Business-to-Business Online Business Communities (B2B OBCs). Toward this goal, this study proposed a conceptual framework based on the Social Exchange Theory (SET), Uses and Gratification theory (U&G), and the Information Systems Success Model (ISSM). The framework was further explored and tested using semi structured interview with twelve members of B2B OBCs. The findings suggest that reciprocity, trust, reputation/status, functional factors, system quality, information quality and service quality may affect the level of B2B OBCs' participation. Acknowledging the qualitative nature of this study, the proposed framework was only tested on small number of participants and therefore findings limit generalisation to the wider business population. Therefore a future empirically study will be conducted in order to thoroughly test the framework.

Keywords: Business-to-Business, Online Business Communities, and Active Participation.

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1.0 Introduction

Online Communities have existed for almost three decades (Wang and Fesenmaier, 2004a), but they have only become a new social phenomenon since the proliferation of Internet applications from late 90s. A systematic review of the current literature shows a significant increase in OCs interest by both industry and academic researchers from 2001 to 2006 (Laine, 2009). Despite there being a large amount of research in this field, there is neither an accepted definition nor a standard typology for OC. The term Online Communities (OCs) is known to people by different names such as Virtual Communities (VCs), Computer Mediated Communities (CMCs), community portal, and Online Discussion Forums (ODFs) (Fisher and Craig, 2005, Wang and Fesenmaier, 2004b). Hence, throughout this paper the term 'OC' is largely used for any of these terms.

There are various types of OCs serving different purposes, and there is a growing interest in studying the role of these types of OCs in a variety of disciplines such as education, health, business, and psychology. However, the success of an OC still largely depends on its members'

participation and contribution (Tedjamulia et al., 2005). Active participation has always been a major concern for OCs owners and managers and has been a difficult task to achieve (Wang and Fesenmaier, 2003, Bishop, 2007). Researchers have attempted to examine the participation issue in a variety of OCs ranging from online discussion forums to online health and learning communities. Yet the participation issue in Business to Business Online Business Communities (B2B OBCs) still needs to be further examined, since the current literature provides very limited insight in this area. Prior studies have shown that factors affecting participation vary from one community type to another (Preece et al., 2004, Nonnecke and Preece, 2001) depending upon the community members' characteristics, or the purpose of the community (Wang and Fesenmaier, 2004a).

The aim of this research is to develop a conceptual framework for a better understanding of factors affecting B2B OBCs' active participation. The proposed framework combines previous theories and models (i.e. SET, U&G, and ISSM) that are used to analyse OCs. An exploratory study is conducted to test and further explore the initial framework. A revised framework is proposed thereafter with the aim to conduct future empirical investigation to thoroughly test the revised framework. Based on the literature review, this study also establishes typologies for OBCs.

2.0 Online Business Communities (OBCs)

OCs has been described with different definitions throughout the literature (Stockdale and Borovicka, 2006). The concept describes a group of people with common interests or goals, which uses computer networks to interact with each other to share information (Koh and Kim, 2004, Cothrel and Williams, 1999). Jones (1997) has set the minimum criterion for being an OC, these includes interactivity, communicators, sustained membership, and virtual space. There is not a standard typology or classification for OCs, since OCs has been classified differently. For example, Hagel and Armstrong (1997) classify OCs into communities of transaction, interest, fantasy, and relation which are based on members' needs. Lazar and Preece (1998) classify OCs based on four characteristics such as attributes (i.e. goals, members, and activities), supporting software (i.e. technology), relationship to physical communities, and boundedness (i.e. people, location, and social relationship). In their study DeSanctis et al. (2003) compared forty OCs, and

summarised them into three types: 1) community of information kiosks, 2) online communities of association, 3) and community of practice. Also based on content, Jin et al. (2010) identify two types of online communities: 1) member initiated communities that are managed by their members, 2) and organisation sponsored communities that are sponsored by either commercial or non commercial firms.

It is evident that there is no universally agreed method to classify OCs and OBCs in the current literature. Consequently, this study proposes that OBCs should be considered as a separate typology of OC which belongs to the business sector. Further, marketing literature shows that OBCs can be classified into Business to Consumer Community (B2C), and Business to Business community (B2B) (Hagel and Armstrong, 1997; Rohm et al., 2004; Wind, 2006). B2B communities can also be divided into two types: B2B e-commerce OBCs, which bring buyers and sellers together for transaction purposes (Schubert and Ginsburg, 2001; Boeck et al., 2009; Perry et al., 2002). Hence, the main activities of these types of OBCs involves buying and selling (Deeter-Schmelz and Kennedy, 2004; Rohm et al., 2004). The second type described by Hagel and Armstrong (1997) are called B2B relations OBCs, which bring businesses together to share knowledge and information. OC scholars refer to them as knowledge sharing communities (Mason et al., 2008a). Very little evidence is found with regards to these types of communities. Figure 1 shows our typology of OBCs. B2B relation OBCs are the main focus of this study.

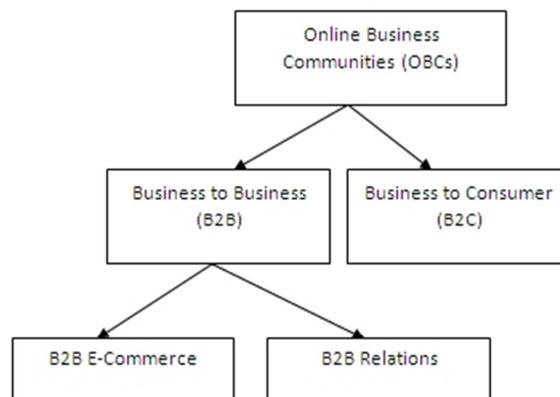


Figure 1. A typology for Online Business Communities (OBCs).

Based on our proposed typology shown in Figure 1, this paper defines B2B relations OBC (simply referred as B2B OBC in this paper) as any OC that represents a group of business

owners and managers whose purpose is to provide support and expertise to each other, to share information, and promote their understanding on business related issues, using a communication technology to support the success of their businesses. The main difference between B2B OBC and any other types of OCs is that the majority of B2B OBCs' participants are business owners and managers who join such a community for their business benefit rather than their individual interests and benefits.

3.0 Active participation

Active participation is a fundamental success factor for any type of OC (Ardichvili et al., 2003). Cheung and Lee (2009) stated that, "The value of virtual communities can only be achieved when there are significant numbers of members who are willing to stay and exchange information with other". Having a large number of community members and having a large balanced proportion of active members are the two main factors for determining the success of OCs (Wang and Fesenmaier, 2004b, Cothrel and Williams, 1999, Cothrel, 2000). The term "active participation" refers to taking part in or contributing to some activities in OCs (Shang et al., 2006), which mainly relates to posting messages, asking questions, providing information and expertise, sharing ideas, interacting and communicating actively with other members (Wang and Fesenmaier, 2004b, Mathwick, 2002, Jin et al., 2010). Han et al. (2007) posited that participation intention is manifested by member behaviours such as willingness to stay, willingness to help other members and spending money on products and services.

Active participation is seen as a major concern for OCs (Bishop, 2007) as prior studies have found that only a small percentage of OCs' members make content contribution (Lampe et al., 2010, Preece et al., 2004, Nonnecke and Preece, 2000, Shang et al., 2006). Although, the literature demonstrates that participation issue has been examined in various types of OCs, very little research has focused on B2B OBCs. Despite the recognition of all the benefits of B2B OBCs by researchers and business owner and managers, particularly their benefits of knowledge sharing, business are still unwilling to use them or actively participate in them (Chen et al., 2006). Limited studies have attempted to examine technology and sharing knowledge online (Fisher and Craig, 2005) and B2B e-commerce among SMEs and their suppliers (Mason et al.,

2008a; Boeck et al., 2009). This study attempts to fill a gap in the existing literature by providing an insight into the factors that may influence active participation in B2B OBCs.

4.0 Proposed conceptual framework

Since OCs are considered as socio- technical systems (Mason et al., 2008b, Preece, 2001), OC scholars have largely focussed on their research on OCs from social and technical perspectives. Social Exchange Theory (SET) and Uses and Gratification Theory (U&G) are the most widely used theories to explain active participation in OCs (Jin et al., 2010; Liao, 2008). Subsequently, these two theories are used as a basis for developing the proposed framework. This paper expands these two theories by applying them at an organisational level (i.e. B2B), when explaining active participation among the members of B2B OBCs. Information system researchers have also applied Information System Success Model (SSM) to investigate the adaptation of new technologies, yet very few researchers have applied ISSM to investigate OCs' active participation. This paper also expands ISSM by partially applying the model to investigate active participation among the members of B2B OBCs.

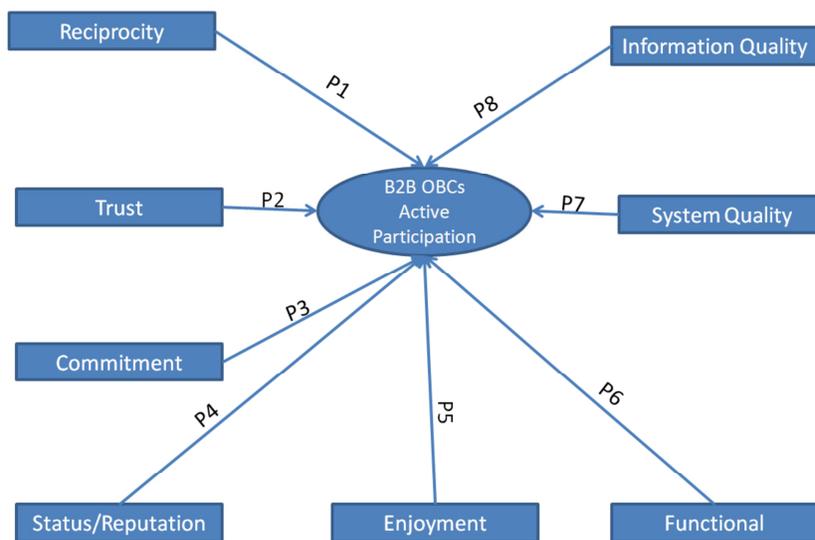


Figure 2: Framework for factors affecting active participation within B2B OBCs

The following sections discuss SET, U&G and ISSM and propose a new framework to describe active participation in B2B OBCs.

4.1 Social Exchange Theory (SET)

The interaction between the participants of OC has been well recognised as social exchange (Jin et al., 2010). This paper identifies three components of SET including reciprocity, trust, and commitment. SET has been applied in studying various OCs to explain active participation and identify motivational factors to encourage active participation in OCs (Jin et al., 2010; Liao, 2008; Tiwana and Bush, 2001).

SET is the most commonly used theory for explaining the behaviour of individuals and their communication in online environments in particular OCs (Wu et al., 2006). This theory originated from Economic Exchange Theory (EET) (Blau, 1986; Liao, 2008). SET suggests OCs participants use a cost- benefit approach to interact with each other and seek to maximise their benefits and minimise their costs when interacting with others (Liang et al., 2008). Hence, individuals' exchange behaviour depends upon reciprocity (Wu et al., 2006). However, SET does not guarantee reciprocity in online environments (Liao, 2008). Prior researchers suggested that reciprocity positively associated with online community participation (Jin et al., 2010). In online environments if people think they will get pay back from what they contribute, they will be willing to make more contribution (Wasko and Faraj, 2005; Ye et al., 2006). Hence active participation will occur when there is an obligation for reciprocity (Constant et al., 1996; Ye et al., 2006). In their study, Ye et al. (2006) found reciprocity associated with knowledge contribution intention in an OC environment. Based on the existing literature and in-depth understanding of reciprocity, this study proposes that:

Proposition P1: Reciprocity positively affects active participation in a B2B OBC.

Trust is seen as another central constructs in the SET model (Liao, 2008), which can explain participation behaviour within OCs (Chiu et al., 2006). Trust is a multi-dimensional concept that have captured the attention of researchers and practitioners for many decades (Nolan et al., 2007), and has been studied in various studies from different disciplines and backgrounds. As a

result of that, the concept has been defined differently throughout the literature, and this has resulted in having various definitions of trust as well as having various typologies of trust (McKnight et al., 2002).

One group of OC scholars have attempted to make a standard definition and develop a standard typology for trust in online environment like online communities of e-commerce (Mcknight et al., 2002). They referred the term as to belief and described as individual believing other individuals that are competence, benevolence, integrity, and predictability. Similarly, Riding et al. (2002) described trusting beliefs in online knowledge sharing communities, as individual believing in others ability, integrity and benevolence. Items measuring the competence and predictability based trust identified by Mcknight et al. (2002), found to be very similar to the items measuring ability based trust identified by Riding et al. (2002), as they largely reflects on individuals are been able to help and fulfil their needs. In addition, items used to measure integrity based trust and benevolence based trust in both studies were almost identical as both measures focused on that individuals are voluntarily cared about other members' needs, individuals are telling the truth and will fulfil promises they make to other members. Accordingly, this research study defines trust in B2B OBCs as trusting belief reflecting on ability, integrity and benevolence described by Mcknight et al. (2002) and Riding et al. (2002).

There is a well developed literature that emphasised on the importance of trusting belief and its effect on participation behaviour in various OCs. For example, trust was seen as key factor for effective collaboration and knowledge sharing, and as a crucial social bond in B2B relationships (Pavlou and Gefen, 2004; Chow and Chan, 2008). Early stream of the literature on trust demonstrated that trust can facilitate online exchange relationship, and leads to greater knowledge exchange (Palvia, 2009; Riding et al., 2002; Mcknight et al., 2002). Trust was also found as vital aspect in small and medium sized enterprises' (SMEs) knowledge sharing communities (Mason et al., 2008). Finding from these prior studies suggests that trust is a crucial factor for the success of any type of OCs. Accordingly, this study proposes that:

Proposition P2: Trusting belief positively affects active participation in a B2B OBC.

Prior studies drawing upon SET have also recognised commitment as another central construct of SET (Chiu et al., 2006). The phenomenon has been described as a psychological bond which stabilises individuals' online activities (Bateman et al., 2010), and it has been expressed as individuals' psychological attachment to an OC (Palvia, 2009), or a sense of emotional involvement with an OC (Cheung and Lee, 2009). Drawn upon organisational literature, OC scholars describe commitment as a bond between a member and a particular OC (Bateman et al., 2010). The existing literature provide evidence supporting the importance of commitment in B2B relationships (Chen and Hung, 2010), and its affect on OC active participation (Hew, 2009). The implication of the results from recent and prior studies demonstrates that commitment positively associated with OC active participation (i.e Bateman et al., 2010; Hew et al., 2009). Accordingly, this research suggests that commitment positively affects active participation within B2B OBCs; thereby the current study proposes that:

Proposition P3: Commitment positively affects active participation in a B2B OBC.

4.2 Uses and Gratification theory (U&G)

U&G theory has been recognised for more than seven decades (Ruggiero, 2000). Originally, the paradigm was used to examine what motivated people to engage with various media types such as radio and newspaper as well as the types of content that gratify their social and psychological needs (Ruggiero, 2000). The paradigm suggests that psychological need, social need, and functional need can explain OC participation (e.g. Wang and Fesenmaier, 2003, 2004a, 2004b). People participate in OCs to fulfil their basic psychological needs such as improving their reputation and status inside their OCs (KanKanhlli et al., 2005; Wakso and Faraj, 2005). Several prior studies have demonstrated that gaining reputation/status positively influence OC active participation (e.g. Constant et al., 1996; Ye et al., 2006; Wang & Fesenmaier, 2004b). Accordingly, this study suggests B2B OBCs' members with higher psychological needs will participate more actively within their B2B OBCs. This way, this study proposes that:

Proposition P4: Reputation/status positively affects active participation in a B2B OBC.

Moreover, enjoying helping others is seen as a social factor that may affect OC participation (Wang and Fesemnaire, 2003, 2004a). Knowledge management literature provides evidence demonstrating the impact of enjoying helping others on knowledge contribution behaviour (Kankanhlli et al., 2005). This study suggests that, though B2B OBCs are businesses and join their OBCs to achieve their business needs rather their individual needs, yet they may still enjoy making contribution and helping other businesses. This way one might suggests that B2B OBCs' members who enjoying helping other members will make more contribution.

Proposition P5: Enjoying helping others positively affects active participation in a B2B OBC.

From U&G view, people may also join an OC to meet their functional needs such as fulfilling specific activities (Wang and Fesenmaier, 2004a). These may include transactions where community members go online to buy or sell products and services or seek information, and make decisions (Hagel and Armstrong, 1997). Accordingly, this study suggests that business owners and managers may join B2B OBCs to gratify their functional needs such as seeking/providing information and support, making contact with other businesses, and advertising their businesses, which largely impact their behaviour within their online environment. Ultimately, B2B OBCs' members with higher functional needs will participate more actively inside their communities.

Proposition P6: Functional needs positively affect active participation in a B2B OBC.

4.3 Information Systems Success Model (ISSM)

In addition to the SET and U&G, this study also proposes that ISSM partially should be applied when examining the effects of system related factors on active participation within B2B OBCs. System quality an information quality dimensions of the ISSM are used to determine the success of various information systems such as B2B e-commerce (Molla and Licker, 2001), and various OCs (Hsiu-Fen, 2008). Despite an enormous interest of ISSM among IS researcher, very little research has attempted to examine the ISSM within B2B OBCs context. Information system researchers have demonstrated the importance of system quality in OC environments (Chen and Hung, 2010). System quality in an OC largely is concern with the functionalities of the OC site

such as reliability, flexibility, accessibility, ease of use, good navigation, quick response time (Nelson and Todd, 2005, Delone and McLean, 2003). Findings from prior empirical investigation suggest that system quality impact sustainability and the success of an OC (Hsiu-Fen, 2008), impact on blog writing behaviour (Hsu and Lin, 2008), information exchange and knowledge sharing behaviour in an OC (Sharratt, 2003). Based on the findings from prior studies, this paper proposes that system quality impact active participation within B2B OBCs. Accordingly, this study hypothesises that:

Proposition P7: System quality positively affects active participation in a B2B OBC.

Moreover, information quality is another important construct in the ISSM model, which concern with the quality of the content of the website, these include information accuracy, completeness, currency, and format of information presentation (Hsiu-Fen, 2008; Nelson and Todd, 2005; Delone and McLean, 2003). Similar to system quality, information quality was also found to impact active participation within OCs (Hsiu-Fen, 2008; Hew, 2009). Subsequently, this study assumes that there is a positive relationship between information quality and B2B OBCs' active participation.

P8: Information quality positively affects active participation in a B2B OBC.

5.0 Methodology

The literature review on the active participation phenomenon in B2B OBCs shows that this research area has not been explored thoroughly. This indicates that there is a need for an exploratory study to better understand this new phenomenon. Hence, this preliminary study employed qualitative research approach using semi-structured interview to explore the identified constructs and the relationships in the proposed framework presented in Figure 2. Considering that this study did not aim to report statistical relationships among variables but to explore this new research area, qualitative methodology becomes more suitable. Moreover, it is considered to be effective in order to obtain rich information when exploring social, natural, and cultural phenomena in information systems research (Myers, 1999). In fact, numerous OC scholars have adopted similar approach in diverse exploratory studies focusing on various OC types ranging

from online communities of practice to online knowledge sharing communities (Ardichvili, 2003)

The sampling approach used in this study was non-probability and snowballing technique. Twelve semis-structured interviews with B2B OBCs' members conducted. The participants (Male = 68% and Female = 32%) were belonging to four different age groups (21-30= 17%, 31-40 = 17%, 41-50 = 33% and 51-60=33%). The vast majority of them hold a recognised qualification (Master degree = 17%, Bachelor Degree = 42%, AS/A–Levels = 17%, and professional/industry = 25%). The participants (Managers 50% and Staffs = 50%) came from micro businesses (50%), small businesses (42%), and large businesses (8%) over four different industry types (Business Services = 50%, Financial Services = 25%, Retail = 17.5%, and Public Sectors = 17.5%).

The content of the questions was designed based on the theoretical framework in Figure 2.

The questions were piloted with five PhD researchers and two academics and adapted for clarity and relevance to the context of B2B OBCs. Each question related directly to the constructs of the framework. All interviews were recorded and verbatim transcribed. Interviews lasted approximately twenty to twenty five minutes and were conducted at locations convenient to the interviewees. A deductive thematic analysis was undertaken using the guidelines introduced by Boyatzis (1998). This approach has been described as an effective way to analyse data in accordance with a pre-determined theoretical framework (Coulson, 2005), and to test propositions built on previous theories (Ardichvili, 2008; Saunders, 2007). The transcribed interviews entered in NVIVO V8, a software tool to assist analysis of qualitative data. Individual responses to the questions were coded to match the framework constructs. To ensure quality and reliability in transcription, the coded themes were cross-checked by four researchers following Boyatzis's (1998) suggestions for handling qualitative data.

6.0 Findings

6.1 Active Participation and SET

The thematic analysis provides rich information to support the proposed framework. From SET model, P1 postulated that reciprocity has positive impact on active participation in B2B OBCs. The analysis of the interview provides strong evidence supporting this proposition. The participants saw participation in B2B OBCs as two way things. This demonstrates that people participate actively in their B2B OBCs if only they get some benefits. These benefits were seen similar to their functional needs such as gaining knowledge, learning new information, finding new business contacts, and business promotion. Furthermore, it was found that some participants were not even willing to remain in their B2B OBCs if they felt no clear business benefit. Therefore, our findings concur with previous studies by (Wasko and Faraj, 2005; Ye et al., 2006) whom found reciprocity as one of the most important factors influencing active participation in online environments. Evidence supporting P1 is demonstrated in the following direct quotes from the participants:

*'I think anything is **two way transaction**, is always gonna be more interested than me **just contributing and nothing coming back.**'*

*'If I didn't think there is not any **benefit to me, I wouldn't continue.** However, I think for my experience, that **you get out of it what you were prepared to put into it.**'*

*'...to have an active participation , means that will **give you benefits.**'*

*'...they would probably think there is a **little value doing this again.**'*

*'... the more likely **get response** to a questions you asked, the more likely you **want to contribute .**'*

*'... if I wasn't **going to get what I expected**, then there is no point in diverting my time , that would be **wasting my time**'*

*'if you think that you **not benefiting from this** you know you **wasting your time participating** somewhere that nobody give you more insight to your business , or any more new insight to what you trying to develop or achieve .'*

The analysis of the data also provides rich data to support P2 as it was found out that trust plays an important role in B2B OBCs active participation. Trust was measured by a single question reflecting on trusting belief. Almost all participants regarded trust as very important. This finding

accords with the findings from previous studies who proposed trust as an important factor affecting participation in OCs (Han et al., 2007; Lin, 2008; Levin and Cross, 2004). The following comments eloquently illustrate support for P2:

*'You know you have to have **a sense of trust**...there are many "hunters" out there...'*

*"I think I place myself in a position where I know already I am in a **fairly safe** place ... I am more cautious and **less trusting** of people generally."*

*'I think that is really crucial, that is really, really **important that you trust**'*

*'like I said earlier, I think there'll be **two parts to the trust**... it's an anonymous community , if it's all anonymous , its slightly **less easy to trust** the answers of the other people gave, because if they have their real name, they're putting their professional reputational at stake when they answer.'*

*'I am gonna use the word "con" because I've had that people joined our community and they are obviously trying to **be dishonest**, then you can't have them as part of your community, so you've got to have that **feeling of trust** within the community that everybody is behaving in a trust worthy way.'*

Unexpectedly, very limited evidence was found to support the positive relationship between commitment and active participation. Commitment was mainly measured by how participants felt connected and attached to their B2B OBCs and the amount of time they spent in their B2B OBCs. Although it seems the majority of the interviewees were active members of their B2B OBCs, yet they were not committed to their communities. In addition, some participants were reluctant to take members who commit too much of their time participating in their community. This finding suggests that commitment may not be enough to motivate B2B OBCs members to be more active. This may imply that commitment may have indirect affect on active participation in B2B OBCs. This finding contradicts prior studies of OCs that have found commitment to have a positive impact on active participation (Wu et al., 2006; Ye et al., 2006). The analysis of the data provides very limited evidence to support P3, and this evident in the following comments:

*'...you will get some people **more committed** at some points than others, and some people will be **very committed to their community**, and, and **their commitment** will also depend on other issues, because I think outside issues really impact a big time'*

*'I'd say so, but I would be hesitant if people who **commit too much** to something like that, if you know what I mean? If they spent literally all day on that community, I wouldn't, I wouldn't take what they said too seriously'*

*'I'd say the **biggest commitment** you could give to them is time rather than money, because if you give a lot of time on the community" ... "but also if they spent too much time on there, I would say, that will give me a negative opinion on them **because they committing a lot of their valuable time** to something that doesn't get them work or anything.'*

6.2 Active Participation and U&G

Almost all the participants expressed that increasing their business reputation and status inside their community play an important role in their decision to make active participation. This finding corresponds to the Wang and Fesenmaier (2004a) study of online travel communities. The following comments eloquently illustrate support for P4:

*'I think it would do, because it [active participation] **increases your presence....'***

*'... being part of that discussion group would **give more credibility** and people would be more likely to use my service if they saw me as a specialist in that field ...'*

*'If I am dealing with fellow professionals in my area , and I've been seen to contribute to meaningful content, then I think that **gives me some standing...***

*'I am using those forums to create a **personality** for our business, and to say we can do this and we can do the other, and **increase our reputation**. and is a really affective way of doing it actually, because I've been able to reach out to people that I wouldn't necessary have been able to reach out before .'*

Very limited evidence were found to support P5 as only one participant considered participating in her B2B OBCs as fun and enjoyment. This finding contradicts with the outcomes suggested by Wang and Fesenmaier (2004a) who indicated that enjoying helping others seem to be positively associated with active participation. On the other hand, the analysis of the data suggested that members with higher functional needs (i.e gaining knowledge, business promotion, and finding business contacts) would participate more actively in their B2B OBCs. The majority of the interviews were considered as active members of their B2B OBCs, and they were very concentrated on achieving their business needs than their individual needs such as socialising. Therefore, this finding provides support for P6.

*'There is some forum I used to go onto and there was comments on there that had been sent through like – **how good was the networking meal, or the food was, I think that's wasting my time..'***

*'I have to see value...I use the site (named) because I am dealing with business professionals...so I need to see that it retains its professionalism as a business tool...but **if I start seeing a photo of somebody's Xmas party on there I will be dropping out**'*

*'..don't forget the website it was not just a discussion board . One of the hooks was the fact that they could **promote their company** on the website free of charge ...'*

*'I guess **solutions to problems**, if I had a problem. I'd first of all I go to that forum if thought they could **provide solution.**'*

*'Yes, I see it [active participation] as a **way for promoting my business**'*

6.3 Active Participation and ISSM

From ISSM it was found that system quality and information quality played an important role in member's participation behaviour inside their B2B OBCs. Therefore the findings from the interview data provided strong evidence supporting proposition P7 and P8. Three participants considered system quality mainly as easy to use and easy to navigate of B2B OBCs' websites. The vast majority of the participants believed system quality is an important factor for active participation as this was expressed in their comments, therefore proposition P7 was supported.

*'They [the B2B OBCs] have got to **be easily accessible**...if you've got to go through various stages to get where you want to be , then you are not going to spend the time doing it...'*

*'I don't find (named) **very easy**...we were **trying to work out how to post a message** and I don't think I did it right at all at the end...'*

*'They [the B2B OBCs] have **got to be quick**; you can go to it and get a thread that you can respond to **quickly and easily**....'*

*'.....I think needs to **be clarify slightly**, sometimes searching for a **group could be difficult***

*'**easy navigation and easy to use**" that probably be the key ones, because it a bit frustrate me if you always going backwards and forwards or things popping up of the screen, you know. I lose patient very quickly. So if something crashes on me or something is not obvious.'*

P8 postulated that information quality positively affects active participation. The participants considered information quality mainly as accuracy and currency of the contents of their B2B OBCs and saw it as important factor for their active participation. This concurred with the findings from the previous studies which found that information quality affected participation in

OCs (Jin et al., 2010; Koh and Kim, 2004; Joyce and Kraut, 2006), and therefore proposition P8 was also supported.

*“Poor **quality messages** and spelling mistakes would affect me.”*

*“...if I find the **information bad**...I would not visit three times a week.”*

*‘It would be “a deterrent factor”, if the site was hijacked by armatures for example. And they **were putting up miss information** and swamping with that because they have more time than yea you would probably. You would be in touched with the moderator, if it wasn’t dealt with probably, then there is not point been part of that community.’*

One important issue that emerged from the interviews was the importance of the moderators. The majority of B2B OBCs are managed by moderators. During the first interview, it was found that moderation appeared to have a major impact on active participation. Questions regarding the importance of moderation were then asked in the subsequent interviews. The role of moderator is not just to encourage members to take active participation, but also to prevent people and their actions that negatively influence active participation. For example, the impact of the lack of moderation became more apparent in the following comments:

*‘... there was a lot of “bickering”... and there was a lots of, I don’t know what you call it “kick-haling”, may be **trying to put people down** a little bit, so that would be one of the reasons. I have come across that a couple of times on certain sites... those sorts of things **stop me from going on to certain sites**’*

*‘...so you’re not allowed to sell on (named) and I hadn’t understood that at the first. I just put an email about it [self promotion], I think it was a Xmas card or something. **I got some really shouting answers** from people. I thought it wasn’t meant like that. A couple of people emailed me back, so I thought **I won’t bother with that again.**’*

*‘...I found out that **unless I personally intervened** and contacted everybody...unless I made that intervention, **hardly anybody participated at all.**’*

*‘whoever is **facilitating the forum will not allow people to be bullied or trolled** or any of those things that, you know, that make people feel uncomfortable’*

*‘I would expect a good community host to be able to **identify the active members** and be able to **introduce new members** to the relevant person if they had a question....’*

*‘**Moderation is obviously quite important one**, because if there are people on there either posting false information on purpose or they’re just on there to cause trouble. **I’d hope the moderators would fairly swift and getting rid of them**, if I was paying for the service, I’d expect that to be one of the key things I was paying in for, because obviously moderators need to get paid’*

The above evidence from interviews appears to suggest that another important construct in relation to the service quality of moderators should be considered in the research model. This is also in line with the revised version (ten year update) of IS success model by DeLone and McLean (2003). They argued that the quality of services provided to the end users had become increasingly important in facilitating the use of information systems. Therefore, they added service quality as another dimension affecting IS success in the revised ISSM. The service quality of moderators in our context is therefore one of the important items in measuring the service quality of B2B OBCs. Consequently, another research proposition is proposed as:

P9: OCs service quality is positively associated with B2B OBCs active participation.

7.0 Summary of the preliminary study

The preliminary study has provided supporting evidence for the proposed framework. Strong evidence was found with regards to the P1, P2, P4, P6, P7 and P8. Hence, reciprocity, trust, reputation/status, functional needs, system quality, and information quality may be seen as the key factors affecting active participation between B2B OBCs members. However, very limited evidence was found with regard to the P3 and P5. Moreover, moderation was identified as part of service quality, and this was seen as another important factor affecting active participation. Hence P9 is added to the framework and supported by all the interview participants. Table 2 shows a summary of the outcome of the data analysis in relation to the research proposition testing.

Table 2. A summary of the outcome of the thematic analysis.

| Propositions | Relationships | Evidence found to Supported |
|--------------|--|-----------------------------|
| P1 | Reciprocity --> Active Participation | Yes |
| P2 | Trust --> Active Participation | Yes |
| P3 | Commitment --> Active Participation | No |
| P4 | Reputation/status --> Active Participation | Yes |
| P5 | Enjoying Helping --> Active Participation | No |
| P6 | Functional needs --> Active Participation | Yes |
| P7 | System Quality --> Active Participation | Yes |
| P8 | Information Quality --> Active Participation | Yes |
| P9 | Service Quality --> Active Participation | Yes (added) |

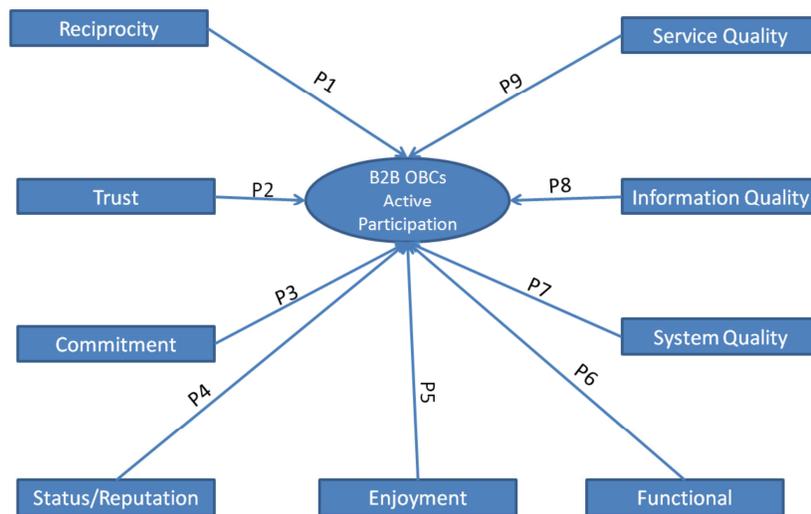


Figure 3. The revised framework for factors affecting active participation within B2B OBCs

8.0 Conclusion

Despite numerous studies on OBCs, we found limited research examining factors pertinent to the active participation in online business communities. Building on SET, U&G theory, and IS success model, we proposed a conceptual model to develop a better understanding of the factors affecting active participation in B2B OBCs. We then conducted semi-structure interviews with twelve participants of B2B OBCs to explore and test the constructs of the framework. The preliminary findings suggest that trust, reciprocity, trust, reputation/status, functional needs, system quality, information quality, and service quality affect active participation. However, very limited evidence was found with regards to commitment and enjoying helping others, and active participation.

In summary, this study makes several contributions. First, it adds to the literature by defining and classifying OBCs with the establishment a typology. Secondly, considering a lack of relevant framework for B2B OBCs, this study contributes to the existing literature through the proposed conceptual framework to address active participation in these types of communities. Thirdly, OBCs scholars have applied SET and U&G at individual level. This study has combined theories

of SET, U&G and IS success and attempted to apply these theories in examining the active participation at the organisational level e.g. business to business level.

Acknowledging the qualitative nature of this study, the proposed framework was only tested on small number of participants and therefore findings limit generalisation to the wider business population. However, the framework serves as a platform for developing and designing future research to test and validate the conceptual framework with a larger data set and expanded unit of analysis. The revised framework is empirically tested with a survey of 521 members of B2B OBCs and the results of this study will be published in near future.

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