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ACTIVE PARTICIPATION IN BUSINESS-TO-BUSINESS ONLINE COMMUNITIES: A CONCEPTUAL FRAMEWORK

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Abstract

Online communities (OCs) have been studied for the past several decades by many scholars from different disciplines and backgrounds. It is found that the success of an OC largely depends on its members' participation and contribution behaviour. While significant research has examined the factors affecting participation in various OC types ranging from online communities of practice to online social networking sites, little research has focused on Business-to-Business (B2B) OCs. Hence, the primary aim of this paper is to provide some understanding of the most important factors affecting active participation in B2B OCs. Towards achieving this goal, this study proposed a theoretical framework underpinned by two well-known theories: Social Exchange Theory (SET) and Uses and Gratification theory (U&G). This study contributes to the OC literature by defining and classifying online business communities and proposes a theoretical model to address active participation in B2B OC. This is a theoretical study and its application has not been tested on a particular community, the next step therefore is to conduct future studies to empirically test the framework with B2B OCs members.

Keywords: Active Participation, B2B, and Online Communities.

1.0 Research Backgrounds

Online Community (OC) is a term known for more than two decades and for the past several years it has been seen as a very popular topic amongst researchers. OC has been recognised as a very complex phenomenon and it has been described by different terms and definitions. More commonly used terminologies include virtual communities (Hagel and Armstrong, 1997), computer-mediated communities (Wang and Fesenmaier, 2004), and electronic communities (Wasko and Faraj, 2000). The definition of the concept varies from one researcher's point of view to another and from one study context to another. Several researchers have defined the concept very briefly and described it as groups of people with a common purpose communicating through communication technologies (Ahuja and Galvin, 2003, Lin, 2007, Hew, 2009). Some researchers have identified OC attributes instead of giving a precise definition (Kim, 2000, Damsgaard, 2002). However, this study proffers an advanced and succinct definition for OCs by including seven attributes: people, time, geographical location, purpose, active participation, technology, and policy. Accordingly, in this study an OC is defined as a virtual place consisting of a group of people from different geographical locations with a shared purpose or interest governed by policies, who have already established some level of active participation regardless of time through a communication technology. Moreover, the current literature has shown that there is not a universally agreed way to classify OCs. Different researchers have proposed different classification schema for OC based on different attributes such as people, technology, and purpose (Hagel and Armstrong, 1997, DeSanctis et al., 2003, Kim 2004, Porter 2004, Erat et al., 2006, Jin et al., 2010). Following an examination of the proposed typologies in the literature, this study proposes to classify OCs based on the disciplines they originated from. Based on that proposition, in this study Online Business Community (OBC) is identified as one element of the taxonomy and further sub-communities such as Business-to-Business (B2B) and Business-to-Consumer (B2C) are identified as sub typologies for OBC. The (B2B) sub-typology is further defined as relational or as trading (e-commerce). B2B relational communities are simply referred to B2B OCs in this study. Using the identified attributes associated with an OC, B2B OCs are described as groups of business owners and managers with a shared purpose governed by policies, who have already established some level of participation through online systems. The importance of these types of community for businesses is well documented in the literature, particularly their benefits for knowledge sharing,

accessing experts' advice, and forming business relationships. Active participation can be seen as a fundamental success factor for any types of OC including B2B OCs (Ardichvili et al., 2003, Cheung and Lee, 2009). OCs like B2B OCs can only achieve their purpose and meet their members' needs if there is some level of active participation among the members (Cheung and Lee, 2009). Prior researchers have stated that many OCs have failed due to lack of active participation between the community members (Hsu and Lin, 2008). Therefore, it is believed that the success of an OC still largely depends on its members' participation and contribution (Tedjamulia et al., 2005). For that reason a large number of studies have examined the participation phenomenon in various OC settings. For example, factors affecting participation behaviour in OCs that are knowledge sharing communities have been explored by Kankanhalli et al. (2005), Lu and Yang (2011), and Chai and Kim (2012). Factors affecting knowledge contribution in communities of practice have been discussed by Wasko and Faraj (2000 and 2005). Factors affecting participation level in online travel communities have been studied by Wang and Fesenmaier (2003, 2004). Factors affecting active participation in B2B e-commerce communities have been explored by Zimmer et al. (2010). Factors associated with participation in B2C communities have been examined by Evans et al. (2001). Numerous researchers have also attempted to increase the level of participation through introducing an ecological framework (e.g. Bishop. 2007), through design guidelines (e.g. Gurzick and Lutter, 2009), and through identifying motivational factors (e.g. Yang et al., 2007). Given the findings of these prior studies, active participation can also be recognised as a fundamental success factor for B2B OCs. Particularly, an examination of the current literature suggests that without active participation a B2B OC cannot deliver benefits (e.g. knowledge sharing, providing/seeking support, and forming business relationships) to its members, and therefore these types of OCs will not flourish without active participation. However, considering the importance of active participation for B2B OCs, very limited research has been focused in this area. Additionally, the existing studies in the area largely focused on the adoption of B2B technologies rather than the active participation element (e.g. Zahay and Handfield, 2004, Nolan et al., 2007). Accordingly, this study proposes that the factors affecting active participation in B2B OCs is a gap in the literature, and therefore this study will attempt to address the question of what are the factors affecting active participation in B2B OCs? To answer this research question, this study next proposes a conceptual framework.

2.0 Theoretical Framework

Based on two well-known theories - Social Exchange Theory (SET) and Uses and Gratification Theory (U&G) - this study proposes a theoretical framework for factors affecting active participation in B2B OBCs. These theories have been successfully employed in several past studies that attempted to investigate factors predicting participation behaviour in various OC types: online knowledge sharing, online community of practice, B2B ecommerce, B2C, and online discussion groups (Fisher and Craig, 2005, Mason et al., 2008a, Cheung and Lee, 2009, Carr et al., 2010, Lampe et al., 2010). Accordingly, SET and U&G are also used to underpin this study. In the following subsequent sections a conceptual framework for factors affecting active participation in B2B OCs is discussed.

2.1 SET

SET is the most commonly used theory for understanding the behaviour of individuals and their interaction in online environments, particularly OCs (Ridings et al., 2006). The theory views an OC as a place for exchanging resources (e.g. information and knowledge) between its participants (e.g. individuals, groups, or businesses). SET suggests in 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). From a SET perspective participants in an OC expect some benefits in return when they contribute inside the community (Abrams et al., 2003). Thus, according to the theory an individual's exchange behaviour in OCs depends upon reciprocity and reward (Wu et al., 2006). The interaction between the participants of OCs has been well recognised as social exchange (Jin et al., 2010). Therefore SET has been successfully utilised in numerous prior studies that investigated the factor affecting participation behaviour in various OC types (e.g. Chiu et al., 2006, Ridings et al., 2006, Chen et al., 2010). Based on relevant literature in the field, this research identifies three components of SET, namely reciprocity, trust, and commitment (Ridings et al., 2006, Liang et al., 2008). These could also have applicability to the context of B2B OCs as prior researchers have shown the importance of these constructs between firms (Lu and Yang, 2011, Chen and Hung, 2010). The following subsections reviews the three constructs in terms of SET.

2.1.1 Reciprocity

Reciprocity is an important construct of the SET model (Jin et al., 2010). Different definitions for reciprocity are reported in the literature. Scholars have described the phenomenon as a sense of mutual gratitude between people (Shumaker and Brownell, 1984), as a salient motivator for contributors of OCs (Kankanhalli et al., 2005), as a form of extrinsic motivation which affects knowledge contribution behaviour in OCs (Lin, 2007), and as a moral obligation of individuals that influences their knowledge sharing behaviour in online environment (Wasko and Faraj, 2000). Regardless of these definitions, the evidence supporting the positive relationship between reciprocity and participation in OC environments is well documented. For example, past studies have shown that knowledge sharing in OC of practice is facilitated by a strong sense of reciprocity (Wasko and Faraj, 2000). Therefore, OC members tend to make more contributions if they think they will get pay-back for what they contribute (Wasko and Faraj, 2005). Moreover, the phenomenon is often described as extrinsic motivation for OC members. According to Huysman and Wulf (2006) motivation is one of key elements to encourage people to use and share information in IT tools like OCs. Lin (2007) provides further empirical support for Huysman and Wulf's claim as she conducted an empirical study to investigate extrinsic motivation (e.g. rewards and reciprocity) and intrinsic motivation (e.g. enjoyment and helping others) on employee knowledge sharing behaviour in OCs. Lin's study results showed that both extrinsic and intrinsic motivational factors were positively associated with employee knowledge sharing attitude and intention. While, the current literature offers us a framework to understand the effect of reciprocity on participation behaviour (e.g. knowledge sharing) in various OC types, there is however limited evidence regarding reciprocity and its effects on participation in B2B OCs. Therefore, existing literature has yet to examine the phenomenon in the context of B2B OCs. The review of the literature provides this study with a strong foundation on how the construct may also affect members' participation behaviour in B2B OCs. Based on the findings from past studies in the area of OC, this research postulates that B2B OCs members will be more willing to participate and make content contribution where they believe in reciprocity. Subsequently, this study proposes that reciprocity has a positive impact on active participation in B2B OCs.

Proposition1: Reciprocity is positively associated with active participation in B2B OCs.

2.1.2 Trust

In addition to reciprocity, researchers have also recognised trust as another crucial construct in the SET model (Liao, 2008, Posey et al., 2010). Trust has also been identified as an important factor that influences participation behaviour in online environments such as OCs (Chiu et al., 2006, Mason et al., 2008b). The need for trust in OCs perhaps can be explained by the existence of difference between OCs and offline communities ‘traditional communities’. In OCs individuals share information and interact with people whom they seldom meet or had no prior interaction with, and this can create uncertainties and a risky atmosphere for the people. Unlike OCs, in traditional communities such uncertainties and risky atmospheres can be minimised by the face-to-face interaction. Further supporting this argument, prior research suggests that in OCs the need for trust emerges due to uncertainty and risky domains (Gefen et al., 2003). The role of trust in OCs has received substantial attention by Information Systems and OC scholars (Ridings et al., 2002, Pavlou and Gefen, 2004, Palvia, 2009, Chen and Hung, 2010). According to Chen and Hung (2010) in an OC trust refers to the degree of belief in good intention, benevolence, competence, and reliability of members who are sharing knowledge. Chen and Hung (2010) conducted an empirical study on knowledge contribution in OC for professionals and found that interpersonal trust positively affects knowledge contribution. Yen, (2009) posited that trust is an important factor for continued use of OCs. Further, Palvia (2009) pointed out that trust can facilitate online exchange relationships. According to Chow and Chan (2008) trust is a crucial success factor for knowledge sharing, which improves interaction between people.

From a B2B OC view trust also can be seen as crucial component, since the findings from the past studies suggest that trust is an important element for active participation because it affects members behaviour such as information sharing behaviour (McKnight and Chervany, 2002, Perry et al., 2002, Shankar et al., 2002, Ratnasingam, 2003, Wu and Chang, 2005, Nolan et al., 2007, Mason et al., 2008a, Palvia, 2009). Particularly, Perry et al., (2002) posited that trust is a crucial social bond in B2B relationships. Marketing researchers have also emphasised the importance of trust between firms (Lu and Yang, 2011). Mason et al. (2008) reported that trust is one of the main factors affecting SMEs’ willingness to share knowledge online. Nolan et al. (2007) conducted research to examine trust in OBCs. The findings from their study suggest that

trust is required at the individual level and it is important for OCs like B2B OCs development. Wu and Chang (2005) carried out an empirical investigation towards understanding members' interactivity and trust in OCs like online travel communities. Their study found that trust was positively associated with interactivity (participation). Hence, the current literature provides a full understanding of the importance of trust in relation to active participation in various OC types including B2B OCs. In the B2B OCs context, participation involves carrying out several activities such as sharing information, seeking/providing support and expertise, forming business relationships, and finding business contacts. These activities would require some level of trust as businesses may be reluctant to share information or disclose such sensitive information with other businesses they don't trust. For example, Mason et al. (2008) posited that disclosing one's business weakness and providing such vital information can be used to harm the business. Thus, one could argue that the importance of trust in B2B OCs is indisputable. Accordingly, this study postulates that B2B OCs members with a high level of trust will participate more actively in the community activities.

Proposition 2: Trust is positively associated with active participation in B2B OCs.

2.1.3 Commitment

Commitment has been well recognised as a central construct in the SET theory (Chiu et al., 2006, Liang et al., 2008, Jin et al., 2010). The notion has been described in many ways such as willingness to make short term sacrifices, desire to continue a relationship, investment in a relationship, and confident in the stability of a relationship (Stanko et al., 2007, Kim et al., 2008, Kim et al., 2008, Wang et al., 2010). In the organisational context the phenomenon has been defined as psychological bonds which make employees stay within an organisation even when higher paid jobs are available (Meyer and Allen, 1991, Meyer et al., 2002, Allen and Meyer, 2011). Morgan and Hunt (1994) stated that commitment is important to relational exchanges between firms. Further, they defined the concept as "an exchange partner believing that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it". In a B2B relationship commitment is defined as willingness to make short term sacrifices to maintain the relationship (Tsiros et al., 2009). In the context of OC, scholars have described the

phenomenon as a sense of emotional involvement with the community, and that it is important for maintaining long term relationships (Cheung and Lee, 2009, Bateman et al. 2010).

The impact of commitment on active participation within the OC context is well known in the literature (Blanchard and Markus, 2004, Casalo et al., 2007, Kim et al., 2008, Cheung and Lee, 2009, Bateman et al., 2010, Jin et al., 2010). Particularly, Blanchard and Markus (2004) have emphasised the importance of commitment in OCs as they stated that OC members form strong emotional attachment and strong effective bonds with their communities. Further, in their study Bateman et al. (2010) found that in OCs commitment is positively associated with active participation behaviour evidenced by members posting messages and replying to posted messages. Their research established that members with high emotional attachment and identification to their OCs are more willing to help other members of their communities. Furthermore, the findings from a study by Cheung and Lee (2009) suggest that the stronger a user's sense of emotional attachment to an OC the higher the likelihood he/she will make contribution. Therefore, the research results from Cheung and Lee's study show that commitment has significant and positive impact on OC users' behaviour such as joining and making contribution.

Drawing upon the findings from the above studies, one might also suggest that commitment can impact on active participation in B2B OCs. More substantial evidence is found to further support this postulation. For example, Sweeney and Webb (2007) posited that commitment is central to the foundation of successful relationships for both individuals and firms. Therefore, it is believed that in B2B relationships commitment is a key element determining the relationship outcomes (Ryssel et al., 2004). Perry et al. (2002) considered commitment as the end point of the development of a relationship which ensures the relationship will continue in the future. Moreover, the findings from a research by Young and Denize (1995) suggest that in a B2B relationship with higher commitment, firms are more likely to honour to decisions and agreements they make, to open with another, and to share more information with one another. Following these studies and based on the findings from prior research in the field of OC, it can be argued that in a B2B OC the stronger a member's sense of emotional attachment to the community the more likelihood he/she will participate actively in that community's activities

such as sharing information, providing support and advice to other community members. Accordingly, this study posits that commitment is positively related to active participation in B2B OCs.

Proposition 3: Commitment is positively associated with active participation in B2B OCs.

2.2 U&G

U&G theory has been recognised for more than seven decades (Ruggiero, 2000). Originally, it 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). Since then, researchers have been active in applying the theory to a wide range of media including OCs. The concept of need is a foundation base for the theory (Ruggiero, 2000). According to U&G, individuals are goal-oriented in their behaviour in OCs and are aware of their needs (Cheung and Lee, 2009). Thus, the paradigm suggests that individuals' participation in OC is affected by their needs such as functional, psychological, hedonic, and social (Wang and Fesenmaier, 2003,2004a, 2004b). Reviewing the existing literature shows that U&G theory has been applied widely at the individual level. Evidence is emerging, however, to suggest that it is equally important to look at U&G at organisational level (e.g. B2B). This study suggests that B2B OCs' members' individual needs differ from their business needs, as they join a B2B OC for their business needs and not necessarily for their individual needs. For that reason, this study suggests that people participate in B2B OCs to satisfy three fundamental needs: functional needs, psychological needs, and hedonic needs. As social need focuses on socialising and considering that this study attempt to apply the theory at B2B level, then social interaction may not be as important and therefore is not included in the framework.

2.2.1 Functional Need

Drawing upon U&G theory, it is believed that OC members participate in the community to gratify their functional needs such as fulfilling specific activities (Wang and Fesenmaier, 2004a, 2004b). These activities may include transactions where community members go online to buy or sell products and services (Hagel and Armstrong, 1997), information gathering for

learning and decision-making purposes (Wang et al., 2002), or information acquisition or problem solving (Dholakia et al., 2004). The effect of functional need on an individual's behaviour in OCs is also well documented in the literature. Porter (2004) has described OCs as networked-based communities which are geographically and socially dispersed groups with socially close relationships and high interaction. Further, Porter (2004) stated that such interaction and relationships between the community members is driven by members' functional needs. More research has identified the construct as one of the important components for modelling participation in OCs (Wang and Fesenmaier, 2004b). In their study, Wasko and Faraj (2000) have discovered that finding useful and valuable information and finding answers to specific questions were among the main reasons for people's participation in OCs such as community of practice. More empirical evidence found in the IS and OC literature further supports the positive association between functional need and active participation. Based on social psychology literature Ma and Agarwal (2007) conducted an empirical study on identity verification and knowledge contribution in OCs. The findings from their study suggest that functional need in terms of information need fulfilment positively relates to members' satisfaction in OCs, which ultimately increases active participation (e.g. knowledge contribution). Hsu et al. (2007) described community related outcome expectation as individuals' expectations about achieving a specific goal and enriching knowledge, which is rooted in the definition of functional need. They found the construct as a motivational factor that impacts knowledge sharing behaviour in OCs.

Based on the extant literature review on functional need and its effect on participation behaviour in OCs, this study suggests that in the context of a B2B OC members' functional needs reflect on the functions or the benefits the community provides to its members. These benefits include effective information sharing, providing/seeking expertise and forming business relationships. Particularly, the importance of B2B OCs for knowledge sharing between businesses is eminent in the current literature. In OCs information sharing has been recognised as a strategic asset and as a potential foundation for obtaining competitive advantage for businesses (Liang et al., 2008, Mason et al., 2008b, Chen et al., 2012). Further, knowledge sharing can prompt SME performances and further help them in overcoming some of their business obstacles (Watson, 2007). Accordingly, several research have recognised OCs as the most effective tool to

facilitate knowledge sharing between businesses (Hagel and Armstrong, 1997, Van-Laere and Heene, 2003, Hughes et al., 2009, Carr et al., 2010). Furthermore, through online tools like B2B OCs, businesses can also access expert advice and form business relationships effectively and cost-free (Fuller-Love and Thomas, 2004, Wu et al., 2006, Miller et al., 2007, Hughes et al., 2009, Carr et al., 2010). Thus, in this study, acquiring specific information (knowledge), accessing expert advice and forming business relationships are identified as three dimensions of functional need of members of B2B OCs. Consistent with prior research in the field, this study postulates that functional need is a motivational factor to encourage B2B OC members to make active participation. From this view, business owners and managers may participate in a B2B OC to gratify their functional needs, and members who have a higher need for specific information or for expert advice and for building relationships with other members will be more willing to become actively involved in the community activities. Accordingly, this study proposes that functional need is positively related to active participation in B2B OCs.

Proposition 4: functional need is positively associated with active participation in B2B OCs.

2.2.2 Psychological Need

As with functional need, psychological need is also recognised under the U&G theory as a motivational factor for active participation in OCs (Wang and Fesenmaier, 2004a, 2004b). In the OCs context, gaining status can be seen as a psychological need of the members (Lampel and Bhalla, 2007). Status is defined as a person's relative position in a group when this position is based on prestige, honour, or respect (Thye, 2000, Lampel and Bhalla, 2007). Similarly, Liua et al. (2007) define status as one's standing in social hierarchy as determined by respect, deference, and social influence. Lampel and Bhalla (2007) stated that, "status seeking consists of activities designed to improve an actor's standing in a group, and is therefore judged by the degree to which associated activities result in increasing prestige, honour, or deference". Thus, it could be seen that status seeking is rooted in the psychological needs of individuals (Stockdale and Borovicka, 2006, Lampel and Bhalla, 2007). Drawing upon psychological theory, it has been suggested that people who join an OC have a desire to fulfil their basic psychological needs such as sense of belonging and identity expressing (Wang and Fesenmaier, 2004a) and seeking status (Lampel and Bhalla, 2007). Thus, gaining status and reputation are also described as individuals'

psychological need which motivates people to actively get involved in their OCs (Wang and Fesenmaier, 2004b, Stockdale and Borovicka, 2006). For example the finding from a study by Stockdale and Borovicka (2006) suggests that psychological need is positively related to participation behaviour in OC environments. The existence of people's need for gaining status and respect in OC environments is well documented in the literature. Scholars have shown that content contributors gain some respect by making content contribution (Constant et al., 1994, Constant et al., 1996). Further, a study by Chan et al. (2004) reports that self-expression and sharing expertise can increase personal identity, respect, and reputation in OCs. Lampel and Bhalla (2007) have found that status seeking plays an important role in creating and sustaining online consumer communities. Wasko et al. (2009) examined social structure in OCs like electronic networks of practice. They discovered that the active participants in these types of OC have higher needs for enhancing reputation. Within OCs like knowledge sharing communities, expectation to be seen as skilled, knowledgeable or gaining respect from other community members are seen as important reasons for willingness to share knowledge (Wasko and Faraj, 2005, Chiu et al., 2006). Reflecting on these prior studies, there appears to be strong support for a positive relationship between psychological need and active participation in OC settings. Consistent with the extant literature, this study suggests that gaining status is a motivational factor for active participation in B2B OCs. Accordingly, in a B2B OC members may decide to actively get involved in the community and make active participation in order to improve their status and reputation in the community. Therefore, this research postulates that there is a positive relationship between psychological need and active participation in B2B OCs.

Proposition 5: psychological need is positively associated with active participation in B2B OCs.

2.2.3 Hedonic Need

As with functional need and psychological need, U&G theory also suggests that people participate in OCs to satisfy their hedonic needs such as entertainment and enjoyment (Wang and Fesenmaier, 2004b, 2004a). The phenomenon reflects on users' beliefs regarding the amount of fun and pleasure they anticipate from an Information Technology (IT) and this causes the IT users to perceive the site as abundant or interactive (Huang, 2003). In other words, if a user finds a website fun and enjoyable then he/she will have a positive attitude towards using the site. In

contrast, lack of fun and pleasure will make the user stop using the site. Previous studies have shown that perceptions of enjoyment and fun positively influence a user's beliefs of perceived usefulness of a system, and this will enhance the user's performance (Saadé et al., 2007). Therefore, when a user is enjoying and having more fun with using a system, he/she will become more productive and effective. The need for enjoyment and fun can also have the same implication in OCs. For instance, Koh and Kim (2003) have reported that OC members whose hedonic needs (e.g. enjoyment, fun, and pleasure) are met through interaction with other members in the community are more likely to develop a stronger sense of belonging (attachment) to the community, and this will increase their level of participation. More substantial evidence found in the IS and OC literature provides further support to the positive relationship between hedonic need and active participation. In the IS literature hedonic need is mainly described as 'perceived enjoyment' and used as the determinant for a user's intention to use a system. For example, IS researchers have found that perceived enjoyment is a strong determinant for intention to use information systems (Van-der-Heijden, 2004). According to Lin and Bhattacharjee (2010), perceived enjoyment reflects on pleasure and happiness gained from using an IT, which influences users' attitude toward using the technology. Empirical studies have also found that hedonic need is positively related to the level of participation in online travel communities (Chung and Buhalis, 2008, Wang and Fesenmaier, 2004a, Wang and Fesenmaier, 2004b). Building upon the past studies, this research defines hedonic need as perceived enjoyment reflecting on that B2B OC members' ability to gain pleasure from helping others in the community. Accordingly, this study postulates that in a B2B OC the higher the hedonic need of the member the more active they are.

Proposition 6: Hedonic need is positively associated with active participation in B2B OCs.

2.3 Members Business Characteristics

It is believed that individuals' characteristics such as gender, age, and education influence their participation behaviour in OCs. Particularly, the effects of these characteristics on individuals' attitude towards using technologies and their behaviour in online communication are well documented in the literature (Comber et al., 1997, Venkatesh and Michael, 2000, Thayer and Ray, 2006). Prior researchers have also reported the impact of individuals' characteristics on

community participation in OC context (Wang and Fesenmaier, 2004a). However, unlike most OCs, B2B OCs members are largely business owners and managers, and therefore one might argue that their business characteristics such as business size, business age, and business type may have an effect on their participation behaviour, rather than their individual characteristics such as age, gender, and education. This is because business owners and managers may decide to join B2B OCs for their business needs rather than their individual needs. Particularly, the current literature shows the impact of business size on the adoption of e-business applications and its use (Burke, 2005). Given that B2B OCs utilise similar technologies, it could then be argued that business size also has an impact on participation in B2B OCs. Accordingly, this research suggests that B2B OCs members' business size will determine the level of participation of the members. Particularly, prior researchers have reported that smaller businesses are more willing to share information online than larger businesses (Carr et al., 2010). From that perspective, if the B2B OC members see the community as a conduit through which valuable business information can be obtained, and then the members are likely to make more of an effort to participate as active contributors. Furthermore, researchers have also reported that younger businesses have a stronger inclination to expand their knowledge resources, and thereby they have greater tendency to share knowledge online (Chen et al., 2006). Carr et al. (2010) posited that younger businesses have greater needs for knowledge and making business connections. Further, a study by Mason et al. (2008) explored the relationship between business age and willingness to share knowledge online. They found that younger businesses are more willing to share knowledge online than established businesses. This may be influenced by the idea that younger businesses have a higher growth need and they have needs to be more innovative (Mason et al., 2008). In addition, business type is another characteristic that may impact on participation in B2B OCs. For example, it is believed that different industries have different knowledge acquisition online (Carr et al., 2010), and this is found to have an effect on SMEs' engagement in online knowledge sharing activities (Watson, 2007). Accordingly, this study makes the following postulations:

Proposition 7a: There is an indirect relationship between members' business age and active participation in B2B OCs.

Proposition 7b: There is an indirect relationship between members' business size and active participation in B2B OCs.

Proposition 7c: There is an indirect relationship between members' business type and active participation in B2B OCs.

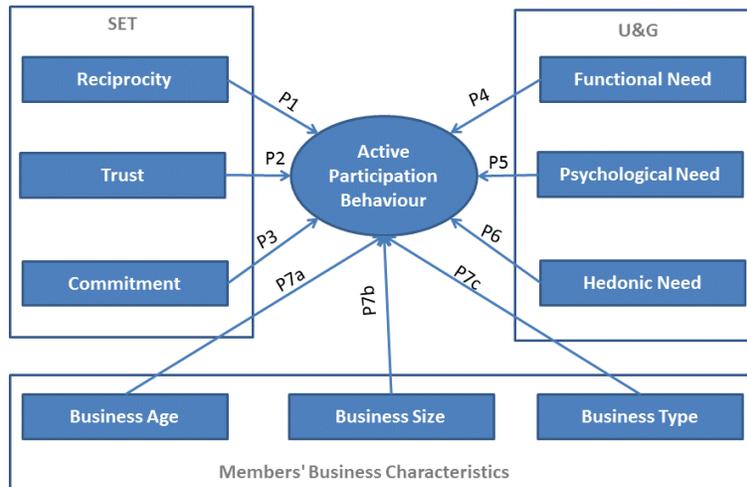


Figure 1: Conceptual Framework for Factors Affecting Active Participation in B2B OCs

3.0 Conclusion and Future Work

Despite numerous studies on OCs, very limited studies were found that focused on factors pertinent to the active participation in B2B OCs. Towards filling this gap in the literature and aiming to explore some of the most important factors affecting active participation in B2B OCs, this study proposes a conceptual framework underpinned by two well-known theories: SET and U&G. 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 OCs, this study contributes to the existing literature through the proposed conceptual framework to address active participation in these types of communities. Thirdly, OCs scholars have applied SET and U&G at individual level. This study has combined the two theories to examine the active participation phenomenon and applied them at the organisational level (e.g. B2B level). This study is therefore theoretical and the conceptual framework proposed has yet to be tested on a particular community. Future studies will address this. An exploratory study will be carried out with B2B OCs members to further explore the framework. An exploratory study is seen as necessary because the active participation phenomenon has not been explored in the context of B2B OCs and also because research in this area is still evolutionary. Subsequently, the revised framework will be tested using a large scale survey. Results will be reported in subsequent papers.

4. References

- Abrams, L. C., Cross, R., Lesser, E. & Levin, D. Z. (2003) 'Nurturing Interpersonal Trust in Knowledge-Sharing Networks' *The Academy of Management Executive*, 17(4), pp.64-77.
- Ahuja, M. K. & Galvin, J. E. (2003) 'Socialization in Virtual Groups' *Journal of Management*, 29(2), pp.161-185.
- Allen, N. J. & Meyer, J. P. (2011) 'The Measurement and Antecedents of Affective, Continuance and Normative Commitment to the Organization' *Journal of Occupational Psychology*, 63(1), pp.1-18.
- Ardichvili, A., Page, V. & Wentling, T. (2003) 'Motivation and Barriers to Participation in Virtual Knowledge-Sharing Communities of Practice' *Journal of Knowledge Management*, 7(1), pp.64-77.
- Bagozzi, R. P. & Dholakia, U. M. (2002) 'Intentional Social Action in Virtual Communities' *Journal of Interactive Marketing*, 16(2), pp.2-21.
- Bateman, P. J., Gray, P. H. & Butler, B. S. (2010) 'Research Note: The Impact of Community Commitment on Participation in Online Communities' *Information Systems Research*, 22(4), pp.841-854.
- Bishop, J. (2007) 'Increasing Participation in Online Communities: A Framework for Human-Computer Interaction' *Computers in Human Behavior*, 23(4), pp.1881-1893.
- Blanchard, A. L. & Markus, M. L. (2004) 'The Experienced "Sense" Of a Virtual Community: Characteristics and Processes' *SIGMIS Database*, 35(1), pp.64-79.
- Burke, K. (2005) 'The Impact of Firm Size on Internet Use in Small Businesses' *Electronic Markets*, 15(2), pp.79-93.
- Carr, R., Castleman, T., Mason, C. & Parker, C. (2010) 'Factors Affecting SMEs' Willingness to Share Knowledge Online: A Path Model' *BLED 2010 Proceedings*.
- Casaló, L. V., Flavián, C. & Guinalíu, M. (2007) 'Promoting Consumer's Participation in Virtual Brand Communities: A New Paradigm in Branding Strategy' *Journal of Marketing Communications*, 14(1), pp.19-36.
- Chan, C. M. L., Bhandar, M., Lih-Bin, O. & Hock-Chuan, C (2004) 'Recognition and Participation in a Virtual Community' *Proceedings of the 37th Annual Hawaii International Conference on System Sciences*.
- Chen, C.-J. & Hung, S.-W. (2010) 'To Give or To Receive? Factors Influencing Members' Knowledge Sharing and Community Promotion in Professional Virtual Communities' *Information & Management*, 47(4), pp.226-236.
- Chen, C.-W., Chang, M.-L. & Tseng, C.-P. (2012) 'Human Factors of Knowledge-Sharing Intention among Taiwanese Enterprises: A Model of Hypotheses' *Human Factors and Ergonomics in Manufacturing & Service Industries*, 22(4), pp.362-371.
- Chen, M.-J., Chen, C.-D. & Farn, C.-K. (2010) 'Exploring Determinants of Citizenship Behaviour on Virtual Communities of Consumption: The Perspective of Social Exchange Theory' *International Journal of Electronic Business Management*, 8(3), pp.195-205.

- Cheung, C. M. K. & Lee, M. K. O. (2009) 'Understanding the Sustainability of a Virtual Community: Model Development and Empirical Test' *Journal of Information Science*, 35(3), pp.279-298.
- Chiu, C.-M., Hsu, M.-H. & Wang, E. T. G. (2006) 'Understanding Knowledge Sharing in Virtual Communities: An Integration of Social Capital and Social Cognitive Theories' *Decision Support Systems*, 42(3), pp.1872-1888.
- Chow, W. S. & Chan, L. S. (2008) 'Social Network, Social Trust and Shared Goals in Organizational Knowledge Sharing' *Information & Management*, 45(7), pp.458-465.
- Chung, J. Y. & Buhalis, D. (2008) 'Information Needs in Online Social Networks' *Information Technology and Tourism*, 10(4), pp.267-282.
- Comber, C., Colley, A., Hargreaves, D. J. & Dorn, L. (1997) 'The Effects of Age, Gender and Computer Experience upon Computer Attitudes' *Educational Research*, 39(2), pp.123-133.
- Constant, D., Kiesler, S. & Sproull, L. (1994) 'What's Mine Is Ours, or Is It? A Study of Attitudes about Information Sharing.' *Information System Research* 5(4), pp.400-421.
- Constant, D., Sproull, L. & Kiesler, S. (1996) 'The Kindness of Strangers: The Usefulness of Electronic Weak Ties for Technical Advice.' *Organization Science*, 7(2), pp.119-135.
- Dabholkar, P. A., Dolen, W. M. V. & Ruyter, K. D. (2009) 'A Dual-Sequence Framework for B2C Relationship Formation: Moderating Effects of Employee Communication Style in Online Group Chat' *Psychology & Marketing*, 26(2), pp.145-174.
- Damsgaard, J. (2002) 'Managing an Internet Portal' *Communications of the Association for Information Systems*, 9(26), pp.408-420.
- Desanctis, G., Fayard, A.-L., Roach, M. & Jiang, L. (2003) 'Learning in Online Forums' *European Management Journal*, 21(5), pp.565-577.
- Dholakia, U. M., Bagozzi, R. P. & Pearo, L. K. (2004) 'A social influence model of consumer participation in network- and small-group-based virtual communities' *International Journal of Research in Marketing*, 21(3), pp.241-263.
- Erat, P., Desouza, K. C., Schafer-Jugel, A. & Kurzawa, M. (2006) 'Business Customer Communities and Knowledge Sharing: Exploratory Study of Critical Issues' *European Journal of Information Systems*, 15(5), pp.511-524.
- Evans, M., Wedande, G., Ralston, L. & Hul, S. V. (2001) 'Consumer Interaction in the Virtual Era: Some Qualitative Insights' *Qualitative Market Research: An International Journal*, 4(3), pp.150-159.
- Fisher, D., Smith, M. & Welser, H. T. (2006) 'You Are Who You Talk To: Detecting Roles in Usenet Newsgroups' *Proceedings of the 39th Annual Hawaii International Conference on System Sciences - Volume 03*. IEEE Computer Society.
- Fuller-Love, N. & Thomas, E. (2004) 'Networking In Small Manufacturing Firms' *Journal of Small Business and Enterprise Development*, 11(2), pp.244-253.
- Gefen, D., Karahanna, E. & Straub, D. W. (2003) 'Trust and TAM in Online Shopping: An Integrated Model' *Management Information Systems Quarterly*, 27(1), pp.51-90.

- Gurzick, D. & Lutters, W., G. (2009) 'Towards A Design Theory for Online Communities' *Proceedings of the 4th International Conference on Design Science Research in Information Systems and Technology*. Philadelphia, Pennsylvania: ACM.
- Hagel, J. & Armstrong, A., G. (1997) 'Net Gain: Expanding Markets Through Virtual Communities' *Journal of Interactive Marketing*, 13(1), pp.55-65.
- Hew, K. F. (2009) 'Determinants of Success for Online Communities: An Analysis of Three Communities in Terms of Members' Perceived Professional Development' *Behaviour & Information Technology*, 28(5), pp.433-445.
- Hsu, C.-L. & Lin, J. C.-C. (2008) 'Acceptance of Blog Usage: The Roles of Technology Acceptance, Social Influence and Knowledge Sharing Motivation' *Information & Management*, 45(1), pp.65-74.
- Hsu, M.-H., JU, T. L., Yen, C.-H. & Chang, C.-M. (2007) 'Knowledge Sharing Behavior in Virtual Communities: The Relationship between Trust, Self-Efficacy, and Outcome Expectations' *International Journal of Human-Computer Studies*, 65(2), pp.153-169.
- Huang, M.-H. (2003) 'Designing Website Attributes to Induce Experiential Encounters' *Computers in Human Behavior*, 19(4), pp.425-442.
- Hughes, T., O'regan, N. & Sims, M. A. (2009) 'The Effectiveness of Knowledge Networks: An Investigation of Manufacturing SMEs' *Education + Training*, 51(8/9), pp.665-681.
- Jin, B., Park, J. Y. & Kim, H.-S. (2010) 'What Makes Online Community Members Commit? A Social Exchange Perspective' *Behaviour & Information Technology*, 29(6), pp.587-599.
- Kankanhalli, A., Tan, B. C. Y. & Kwok-KEE, W. (2005) 'Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation' *Management Information Systems Quarterly*, 29(1), 113-143.
- Koh, J. & Kim, Y.-G. (2003) 'Sense of Virtual Community: A Conceptual Framework and Empirical Validation' *International Journal of Electronic Commerce*, 8(2), pp.75-94
- Lakhani, K. R. & Von Hippel, E. (2003) 'How Open Source Software Works: "Free" User-To-User Assistance' *Research Policy*, 32(6), pp.923-943.
- Lampe, C., Wash, R., Velasquez, A. & Ozkaya, E. (2010) 'Motivations to Participate in Online Communities' *Proceedings of the 28th international conference on Human factors in computing systems*. Atlanta, Georgia, USA: ACM.
- Lampel, J. & Bhalla, A. (2007) 'The Role of Status Seeking in Online Communities: Giving the Gift of Experience' *Journal of Computer-Mediated Communication*, 12(2), pp.434-455.
- Levin, D. & Cross, R. (2004) 'The Strength of Weak Ties You Can Trust: The Mediating Role of Trust in Effective Knowledge Transfer' *Management Science*, 50(11), pp.1477-1490.
- Liang, T.-P., Liu, C.-C. & Wu, C.-H. (2008) 'Can Social Exchange Theory Explain Individual Knowledge-Sharing Behavior? A Meta-Analysis' *Proceedings of the International Conference on Information Systems*, Paris. France.
- Liao, L.-F. (2008) 'Knowledge-Sharing In R&D Departments: A Social Power and Social Exchange Theory Perspective' *The International Journal of Human Resource Management*, 19(10), pp.1881-1895.

- Lin, C.-P. & Bhattacharjee, A. (2010) 'Extending Technology Usage Models to Interactive Hedonic Technologies: A Theoretical Model and Empirical Test' *Information Systems Journal*, 20(2), pp.163-181.
- Lin, H.-F. (2007) 'The Role of Online and Offline Features in Sustaining Virtual Communities: An Empirical Study' *Internet Research*, 17(2), pp.119-138.
- Liua, D., Gengb, X. & Whinston, A. (2007) 'Status Seeking and the Design of Online Entertainment Communities' *Managing in the Information Economy*, pp.281-304.
- Lu, Y. & Yang, D. (2011) 'Information Exchange in Virtual Communities under Extreme Disaster Conditions' *Decision Support Systems*, 50(2), pp.529-538.
- Ma, M. & Agarwal, R. (2007) 'Through a Glass Darkly: Information Technology Design, Identity Verification, and Knowledge Contribution in Online Communities' *Information Systems Research*, 18(1), pp.42-67.
- Mason, C., Castleman, T. & Parker, C. (2008a) 'Factors Influencing Australian SMEs Knowledge Sharing Online' *19th Australasian Conference on Information Systems* Christchurch.
- Mcknight, D. H. & Chervany, N. L. (2002) 'What Trust Means in E-Commerce Customer Relationships: An Interdisciplinary Conceptual Typology' *International Journal of Electronic Commerce*, 6(2), pp.35-59.
- Meyer, J. P. & Allen, N. J. (1991) 'A Three-Component Conceptualization of Organizational Commitment' *Human Resource Management Review*, 1(1), pp.61-89.
- Meyer, J. P., Stanley, D. J., Herscovitch, L. & Topolnytsky, L. (2002) 'Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences' *Journal of Vocational Behavior*, 61(1), pp.20-52.
- Miller, N. J., Besser, T. & Malshe, A. (2007) 'Strategic Networking among Small Businesses in Small US Communities' *International Small Business Journal*, 25(6), pp.631-665.
- Morgan, R. M. & Hunt, S. D. (1994) 'The Commitment-Trust Theory of Relationship Marketing' *Journal of Marketing Management*, 58(3), pp.20-38.
- Nolan, T., Brizland, R. & Macaulay, L. (2007) 'Individual Trust and Development of Online Business Communities' *Information Technology & People*, 20(1), pp.53-71.
- Palvia, P. (2009) 'The Role of Trust in E-Commerce Relational Exchange: A Unified Model' *Information & Management*, 46(4), pp.213-220.
- Pavlou, P. A. & Gefen, D. (2004) 'Building Effective Online Marketplaces with Institution-Based Trust' *Information System Research*, 15(1), pp.37-59.
- Perry, C., Cavaye, A. & Coote, L. (2002) 'Technical and Social Bonds within Business-To-Business Relationships' *Journal of Business & Industrial Marketing*, 17(1), 75-88.
- Porter, C. (2004) 'A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research' *Journal of Computer-Mediated Communication*, 10(1), Wiley Online Library [Online]. Available at: <http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2004.tb00228.x/full> (Accessed: 08 October 2013).

- Posey, C., Lowry, P. B., Roberts, T. L. & Ellis, T. S. (2010) 'Proposing the Online Community Self-Disclosure Model: The Case of Working Professionals in France and the U.K. Who Use Online Communities' *European Journal of Information Systems*, 19(2), pp.181-195.
- Ratnasingam, P. (2003) 'Inter-Organizational-Trust in Business to Business E-Commerce: A Case Study in Customs Clearance' *Journal of Global Information Management*, 11(1), pp.1-19.
- Ridings, C., Gefen, D. & Arinze, B. (2006) 'Psychological Barriers: Lurker and Poster Motivation and Behavior in Online Communities' *Communications of the Association for Information Systems*: 18(16), pp.329-354.
- Roberts, J. (2006) 'Limits to Communities of Practice' *Journal of Management Studies*, 43(3), pp.623-639.
- Rodgers, S. & Sheldon, K. M. (2002) 'An Improved Way to Characterize Internet Users' *Journal of Advertising Research*, 42(5), pp.85-94.
- Ruggiero, T. E. (2000) 'Uses and Gratifications Theory in the 21st Century' *Mass Communication and Society*, 3(1), 3-37.
- Ryssel, R., Ritter, T. & Georg, H. G. (2004) 'The Impact of Information Technology Deployment on Trust, Commitment and Value Creation in Business Relationships' *Journal of Business & Industrial Marketing*, 19(3), pp.197-207.
- Saadé, R., Nabebe, F. & Tan, W. (2007) 'Viability of the "Technology Acceptance Model" in Multimedia Learning Environments: A Comparative Study' *Interdisciplinary Journal of Knowledge and Learning Objects* 3, pp.175-184.
- Shankar, V., Urban, G. L. & Sultan, F. (2002) 'Online Trust: A Stakeholder Perspective, Concepts, Implications, and Future Directions' *The Journal of Strategic Information Systems*, 11(3/4), 325-344.
- Stanko, M. A., Bonner, J. M. & Calantone, R. J. (2007) 'Building Commitment in Buyer-Seller Relationships: A Tie Strength Perspective' *Industrial Marketing Management*, 36(8), pp.1094-1103.
- Stockdale, R. & Borovicka, M. (2006) 'Developing an Online Business Community: A Travel Industry Case Study. *Proceedings of the 39th Annual Hawaii International Conference on System Sciences - Volume 06*. IEEE Computer Society.
- Sweeney, J. C. & Webb, D. A. (2007) 'How Functional, Psychological, and Social Relationship Benefits Influence Individual and Firm Commitment to the Relationship' *Journal of Business & Industrial Marketing*, 22(7), pp.474-488.
- Thayer, S. E. & Ray, S. (2006) 'Online Communication Preferences Across Age, Gender, and Duration of Internet Use' *CyberPsychology and Behavior*, 9(4), pp.432-440.
- Thye, S. R. (2000) 'A Status Value Theory of Power in Exchange Relations' *American Sociological Review*, 65(3), pp.407-432.
- Tsiros, M., Ross, W. T. & Mittal, V. (2009) 'How Commitment Influences the Termination of B2B Exchange Relationships' *Journal of Service Research*, 11(3), pp.263-276.
- Van-Laere, K. & Heene, A. (2003) 'Social Networks as a Source of Competitive Advantage for the Firm' *Journal of Workplace Learning*, 15(6), pp.248-258.

- Van Der Heijden, H. (2004) 'User Acceptance of Hedonic Information Systems' *Management Information Systems Quarterly*, 28(4), pp.695-704.
- Venkatesh, V. & Morris, M. G. (2000) 'Why Don't Men Ever Stop To Ask For Directions? Gender, Social Influence, and Their Role in Technology Acceptance and Usage Behavior' *Management Information Systems Quarterly*, 24(1), pp.115-139.
- Wang, C. L., Indridason, T. & Saunders, M. N. K. (2010) 'Affective and Continuance Commitment in Public Private Partnership' *Employee Relations*, 32(4), pp.396-417.
- Wang, Y. & Fesenmaier, D. R. (2003) 'Assessing Motivation of Contribution in Online Communities: An Empirical Investigation of an Online Travel Community' *Electronic Markets*, 13(1), pp.33-45.
- Wang, Y. & Fesenmaier, D. R. (2004a) 'Modeling Participation in an Online Travel Community'. *Journal of Travel Research*, 42(3), pp.261-270.
- Wang, Y. & Fesenmaier, D. R. (2004b) 'Towards Understanding Members' General Participation in and Active Contribution to an Online Travel Community' *Tourism Management*, 25(6), pp.709-722.
- Wasko, Teigland, R. & Faraj, S. (2009) 'The Provision of Online Public Goods: Examining Social Structure in an Electronic Network of Practice' *Decision Support Systems*, 47(3), 254-265.
- Wasko, M. M. & Faraj, S. (2000) 'It Is What One Does: Why People Participate and Help Others in Electronic Communities of Practice' *The Journal of Strategic Information Systems*, 9(2-3), pp.155-173.
- Wasko, M. M. & Faraj, S. (2005) 'Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice' *Management Information Systems Quarterly*, 29(1), pp.35-57.
- Watson, J. (2007) 'Modelling the Relationship between Networking and Firm Performance' *Journal of Business Venturing*, 22(6), pp.852-874.
- Wu, J.-J. & Chang, Y.-S. (2005) 'Towards Understanding Members' Interactivity, Trust, and Flow in Online Travel Community' *Industrial Management & Data Systems*, 105(7), pp.937-954.
- Wu, S., S. Lin, C. & Lin, T.-C. (2006) 'Exploring Knowledge Sharing in Virtual Teams: A Social Exchange Theory Perspective. *Proceedings of the 39th Annual Hawaii International Conference on System Sciences - Volume 01*. IEEE Computer Society.
- Yang, X., LI, Y., Tan, C.-H. & Teo, H.-H. (2007) 'Students' Participation Intention in an Online Discussion Forum: Why Is Computer-Mediated Interaction Attractive?' *Information & Management*, 44(5), pp.456-466.
- Yen, Y.-R. (2009) 'An Empirical Analysis of Relationship Commitment and Trust in Virtual Programmer Community' *International Journal of Computers*, 1(3), pp.171-180.
- Yoo, K. H. & Gretzel, U. (2008) 'What Motivates Consumers to Write Online Travel Reviews?' *Information Technology & Tourism*, 10(4), pp.283-295.
- Young, L. & Denize, S. (1995) 'A Concept of Commitment: Alternative Views of Relational Continuity in Business Service Relationships' *Journal of Business & Industrial Marketing*, 10(5), pp.22-37.
- Zahay, D. L. & Handfield, R. B. (2004) 'The Role of Learning and Technical Capabilities in Predicting Adoption of B2B Technologies' *Industrial Marketing Management*, 33(7), pp.627-641.