

Small and Medium Enterprises Clustering and Collaborative Commerce – a social issues perspective

Michelle Rowe
School of MIS
Edith Cowan University

Janice Burn
Professor, School of MIS
Edith Cowan University

Elizabeth Walker
Senior Lecturer
School of Management

m.rowe@ecu.edu.au
Edith Cowan University
Joondalup Campus
100 Joondalup Drive, Joondalup
Perth, Western Australia 6027

6186304 5397 (telephone)
6186304 5988 (facsimile)

The authors form part of a team studying collaborative commerce adoption by small and medium enterprises as part of an Australian Research Council grant. This paper explores issues of importance to that larger project, which is multidisciplinary in nature, reflecting the expertise and interests of the authors.

Michelle Rowe is a PhD Candidate in the School of MIS at Edith Cowan University. Michelle is part of the ARC research project team and is looking at collaboration of SMEs using IT (collaborative commerce). The relationship between clustering and collaborative commerce is significant in this research. Prior to this candidacy Michelle was a lecturer in management both in Sydney and Queensland. Michelle is interested in assisting SMEs in the adoption and implementation of e-commerce and c-commerce.

Professor Janice Burn is Foundation Professor in the School of MIS at Edith Cowan University. She has extensive experience in the UK, Hong Kong and Canada. Prof Burn is a prolific academic writer with over 200 refereed publications in journals and international conferences and is on the editorial board of numerous information systems journals. She was a member of the Australian Research Council from 2000-2003 and an advisor to the Australian Government on IT and National Research Priorities in 2002.

Her research interests relate to information systems strategy and benefits evaluation in virtual organisations with a particular emphasis on social, political and cultural challenges in an e-business and e-government environment. She holds five ARC grants and is the Chief Investigator in an ARC research project looking at collaborative commerce for SMEs in the West Australian context which reflects an interest in virtual organisations, collaboration and clustering.

Dr Beth Walker is a Senior Lecturer in Management at Edith Cowan University and is Director of the Small and Medium Enterprise Centre (SMERC). She has extensive business and managerial experience in both Australia and the UK. Dr Walker is involved in numerous community activities including holding the past presidency of the Small Enterprise Association of Australia & New Zealand (WA), a member of the International SEAANZ committee and a member of the National SEAANZ Policy committee, a board member of the State Training Board Small Business subcommittee, a member of the State Ministerial Advisory Committee on Women in Local Government and a past board member of the Swan Region Business Enterprise Centre.

Dr Walker works actively with small businesses in the Perth Region and has extensive experience collaborating with local government and bodies such as AusIndustry to assist small businesses. Dr Walker is involved in the ARC project looking at collaborative commerce for SMES in the West Australian context.

Small and Medium Enterprises Clustering and Collaborative Commerce – a social issues perspective

Abstract

This paper deals with the social psychology associated with networks of small and medium enterprises (SMEs), especially from the perspective of social identity theory. The focus is on collaborative networks of small and medium enterprises (SMEs) and collaboration around information technology (IT) which is known as collaborative commerce or c-commerce.

Since little research regarding this aspect of social psychology has been undertaken with respect to collaborative business networks this paper raises issues and seeks to clarify them in the business context. Further research is required to further investigate how social identity theory 'fits' the business realm and the role it plays in explaining collaborative behaviour.

Key words: collaborative commerce, small business, social psychology

Introduction

Collaborative commerce (c-commerce) is the use of technology, especially internet based technology, that facilitates collaboration amongst businesses. It is one way that information technology (IT) can lead to business transformation. C-commerce is considered by some to be the 'next phase' of the use of the internet by business, however, it may not be appropriate, feasible or possible for some, if not most SMEs. Discussion of the impediments to c-commerce adoption fall outside the scope of this paper though are considered elsewhere (Pease & Rowe, 2005).

Whilst the debate as to membership of clusters or collaborative networks, of which c-commerce is an example, has been more widely discussed, little has been written about the application of social identity theory. The issues raised in this paper are useful to understand the social psychology at play prior to a firm joining a cluster or collaborative network, the valence the SME proprietor places on such membership and the esteem and cohesion issues that play a part in sustaining membership.

The paper focuses on social issues critical to clustering and c-commerce adoption from the perspective of social identity theory. The concept of relationship quality characterising such relationships is also of importance as explained by inter-organisational relationship or network theories, a key element being trust. This has implications for willingness to share information and attitudes to knowledge sharing and though related, fall outside the scope of this paper (see Rowe, *et al*, 2005).

First an overview of collaborative networks and c-commerce is provided as is an outline of the relevance of c-commerce to and adoption by SMEs. A discussion of social identity theory is followed by a series of propositions further research will set out to address.

Collaborative networks

New business patterns are characterised by, *inter alia*, diminishing geographical and time boundaries, globalisation of the labour market, increased connectivity, and extended or virtual companies. There has been a shift to the knowledge era (European Community, 2000) with successful businesses forming alliances and partnerships to compete. Collaborative commerce (c-commerce) and clustering facilitate the coming together of firms, including competitors, to exploit opportunities that arise. As global competition intensifies SMEs are forming symbiotic collaborative relationships as a way to keep up or to access unique or 'pioneering' resources and to achieve efficiencies and access markets. C-commerce is one example of this response and is seen by some as the next stage in e-business.

There have been rapid developments in collaborative networks in the last two decades and involvement in networks contributing to knowledge and productivity. Firms are often reluctant to share information and knowledge formally for fear of their competitive position being undermined so it is ironic that collaboration has been found to contribute to productivity gains. It has been observed (European

Community, 2000, p.18) that 'the relationship between competitiveness and competition may evolve, and that the 'co-opetition' model' may be of use. This is the subject of discussion elsewhere (Pease & Rowe, 2005).

With the concept of knowledge networks, we enter a new era by accepting to assess not only internal values but equally values external to the enterprise. This requires two factors. Firstly firms must have the appropriate tools and capacity to communicate and to stock external knowledge according to its needs. Secondly, they must have in place appropriate processes to assure access to and management of this knowledge in order to exploit it and so generate added value. In other words, firms looking to be involved in collaborative networks need to 'develop a new knowledge management process' (European Community, 2000, p. 3).

Whilst these issues are of interest to the authors, they are beyond the scope of this paper. Of interest here are the psychological issues that explain collaboration by firms around Information Technology (IT).

C-commerce is an example of collaborative networks which arise as knowledge management becomes more widespread. IT and Information Communications Technology (ICT) have brought about a shift in the phenomenon of clusters subjugating the importance of proximity and location by virtual proximity. Additionally ICT fosters interregional collaboration so the boundaries between regions important to regional clusters are no longer as distinct as they once were. IT/ICT are critical drivers of integration and co-operation since they enable businesses to integrate activities and functions otherwise not possible (Joo, 2002).

Collaborative networks, including c-commerce, demand a new approach by firms incorporating new relationships, new assumptions, trust and a shift in culture that values partnerships. Without adopting these factors it is not likely that SMEs will consider these options. Social interactions underpin collaborative relationships. The firm - represented by the proprietor - must be able to see other firms as an extension of itself - a co-opting approach rather than one of competition. This can be explained from the perspective of social network theory and the importance of a collective view preceding such cooperation.

What is Collaborative Commerce?

C-commerce consists of all an organisation's ICT bases, knowledge management and business interactions with its customers, suppliers and partners in the business communities in which it interacts. It can be horizontal competitive co-operation as well as vertical collaboration along a supply chain. Essentially it is the coming together of collaborators around IT to exploit opportunities as and when they arise (McCarthy, 1999; GartnerGroup, 1999).

C-commerce represents the coming together of both ICT and social networks. The collaborations between business and community depend upon the willingness of businesses to network and share information as well as their ability to accept business cultural change. The technology networks depend upon the hard and soft

infrastructure available and the willingness of business to adopt new business methods involving business technological changes (Braun, 2002).

Benefits of C-commerce

C-commerce is concerned with obtaining sustainable competitive advantage from the maximisation of value adding benefits obtained by working collaboratively with others via IT. Given the nature and size of SMEs these potential benefits are very attractive. Collaboration using IT also has been identified as a source of innovation (Ryssel, Ritter & Germunden, 2004).

C-commerce enables firms to 'grow' their assets and access markets (Holsapple & Singh, 2000; Ring & Van der Ven, 1994) and facilitates innovation and information, knowledge and systems sharing and exchange (Holsapple & Singh, 2000) which may lead to increases in efficiency. Internal efficiencies can also be generated by the sharing of information via IT within inter-organisational relationships (IORs) (Ryssel, *et al.*, 2004). Bititci, Martinez, Albores & Parung (2004, p. 266) observe collaborative enterprises or networks 'create new and unique value propositions by complementing, integrating and leveraging each other's capabilities and competencies'.

To make the most of the opportunities afforded by c-commerce, SMEs must adopt 'an entirely different approach to strategic planning and management which can enable them to deploy an extensive infrastructure network based on shared resources with other firms' (Tetteh & Burn, 2001, p.171). This requires strategic thinking, trust and a realization of the importance of co-opting rather than competition which typically exists amongst individual firms.

In summary then, c-commerce requires firms to develop a strategy, both short and long term; adopt appropriate business models; develop and sustain appropriate collaborative cultures engendering trust; invest in IT to facilitate information and knowledge sharing and set in place appropriate organisational structures to enable collaboration (Kalakota & Robinson, 1999).

This collaboration generates 'relational rents' through 'relation-specific assets, knowledge-sharing routines, complementary resource endowments, and effective governance' (Dyer & Singh, 1998, p.674). For such benefits to arise, these elements need to be in place. This is not the case for many SMEs who have not considered c-commerce, let alone have taken a strategic approach, formed appropriate relationships or dedicated assets, resources and routines to enable its introduction.

The absence of relationships, network competence and social identity amongst SMEs act as an impediment to c-commerce adoption. To date the latter factor has not been specifically researched with respect to SMEs, so this paper seeks to highlight what is considered to be an important antecedent to c-commerce adoption.

Small and Medium Enterprises and Information Technology

E-commerce is considered to provide substantial benefits to business, particularly small business, enabling new ways of working to emerge, facilitating an organisation's reengineering. Despite this, SMEs generally lag behind in their adoption of technology, including e-commerce (Bode & Walker 2003). The reasons for this have been the subject of much debate.

Use of information technology by Australian businesses as reported by the Australian Bureau of Statistics (2004) is lower amongst small businesses compared with medium and large enterprises. According to Sensis information (2004) only about one third of small businesses and half of medium enterprises have a web site, with sites predominantly a means to share information rather than enabling online ordering, procurement and other aspects of e-commerce. However internet connectivity and use amongst Australian SMEs has increased over the 2003-4 period.

If firms have been slow to embrace e-commerce then it is little wonder that the uptake of c-commerce, as well as willingness to co-opt, has been slow. Although SMEs may be hesitant to share information for fear of losing competitive advantage, the co-opetition model is useful to consider cooperation. This is discussed with elsewhere (European Community, 2000; Pease & Rowe, 2005).

A majority of SMEs adopt e-commerce just by chance, or take a casual approach, rather than as a consequence of systematic consideration and planning (Engsbo *et al* 2001; Scupola 2002). Past experiences and personal knowledge of the owner have a substantial influence on IT adoption, especially since the small business owner may be seen to be the business (Poutziouris, 2003). This has an important bearing on c-commerce since it is underpinned by shared IT systems between collaborators. This reification of the business according to the perspective of the proprietor also is important from the social identity viewpoint.

Social theory and c-commerce adoption

Where economic actors are concerned only by their individual interests and where they see others as competitive rivals, there can be no possibility for collaborative networks to be widely adopted. Economic actors are finding more satisfactory modes of economic regulation through new organisational forms, in particular through various forms of co-operation between firms. One example of new organisational forms is c-commerce. As discussed, c-commerce demands a new approach by firms incorporating new relationships, new assumptions, trust and a shift in culture that values partnerships. Without the acceptance of these factors it is not likely that c-commerce will be successfully introduced by SMEs.

A coming together around IT is secondary to the formation and existence of relationships between firms, since they underpin collaborative relationships (O'Keefe, 2001). The cultivation of relationships means firms are more able to capture the full value of technology (O'Keefe, 2001). Whilst technology is central to c-commerce, it is the willingness to share information rather than the technology *per se* that potentially constrains the relationship (O'Keefe, 2001; Mason, Castleman & Parker,

2004). Attitudes to knowledge and the willingness to share information with others are critical. Yet the knowledge gained by cooperation may be used for competition (Levy, *et al.*, 2003, p.3). This can only be overcome through the generation of trust, commitment to the relationship and an agreement to not act opportunistically, enforced by endogenous systems.

For c-commerce to be successfully adopted social interaction is the key preceding adoption of technology. An understanding of the importance of relationships is required. Relationships are critical to successful implementation and are developed via networking, hence the importance of relationship quality factors and network competence. To understand this networking consideration needs to be given to two broad groups of theories – network or inter-organisational relationships theories and social identity theory.

In addition to relationship quality issues as encompassed in the discussion of network theory (see Rowe, *et al.*, 2005; Pease & Rowe, 2005), c-commerce requires a view that sees other firms as an extension of itself – a co-opting approach rather than one of competition (Levy, *et. al.*, 2003). Essentially if SMEs see that their identity is more important than a collective identity, co-operation and collaboration is not likely to occur. This is explained in the discussion regarding social network theory (Tajfel, 1982; Tajfel & Turner, 1979; Kramer, 1993). This collective view is an important precursor to the level of co-operation demanded by c-commerce.

What is social identity theory?

Social identity theory has its origins in the work of Tajfel which concerned social perception, prejudice and stereotyping and intergroup conflict and behaviour.

Social identity theory identified the importance of the social self which contrasts with the individual self. Co-operation with others, and so willingness and propensity to enter into c-commerce, is a function of the strength of one's personal identity viz that of a collective identity. When personal identities are salient, the focus is on personal goals and outcomes. For co-operation with others to occur then, the salience of one's collective identity needs to transcend one's personal identity. In this way self-interest is only one variable in explaining co-operation.

Social identity approaches, of which there are three specific theories – social identity theory itself, self-categorisation theory (though some argue this is part of the former) and optimal distinctiveness theory - are concerned with the importance of people's membership of groups and their impact on one's self-concept – who they are and how they differ from others. These concepts apply to SMEs in that the proprietor is the business (Poutziouris, 2003). Hence the proprietors' self-concept and that of the business relates not only to the experiences and accomplishments of the SME but also the groups to which the proprietor (and so by extension the SME) belongs (Sherman, Hamilton & Lewis, 1999).

Tajfel (1982) and Tajfel and Turner (1979) introduced the notion that people attain part of their self esteem from group membership. Since we seek to maintain positive

self-esteem we tend to view groups memberships in a positive light and so behave to maintain positive social identity. When the group (in this case collaborative partnership around IT) achieves its goal or experiences success the social identity of members is enhanced. These positive feelings of self-worth may derive from actual contribution to the group's success or result from identification with the group. Similarly Terry (2003) argues that individuals seek to improve their social identity and are motivated to belong to high status groups, which has implications for e-commerce.

Stereotypes are widely shared images of social groups (Hogg & Abrams, 1999) and can only be couched in terms of social identity of a member of that group. With respect to SME proprietors, do they see themselves as a member of a group of SMEs proprietors that shares certain qualities and traits, or rather do they see themselves as individuals who just happen to be proprietors of SMEs.

Macpherson, Jones, Zhang & Wilson (2003) argue that the SME sector is not homogenous and that management of individual SMEs is contingent upon a number of factors. Storey (1994), Birch (1987; 1995) and others all have in their research identified different types of SMEs, largely based on growth. Growth is synonymous with entrepreneurs. Entrepreneurial SMEs are more likely to not be constrained by existing resources and are more willing to take risks and act in a 'boundary spanning' way, forging relationships which enable them to tap into broader resources via a sharing of capabilities with partners. SMEs likely to enter into e-commerce would tend to be those that are high-growth firms, exhibiting some of the abovementioned characteristics. Whilst there is no widely accepted definition of rapid growth firms Birch (1987; 1995) coined the term 'gazelles'. Interest has focused on 'gazelles' since it is believed these firms contribute significantly to employment growth and economic development. These firms constitute between 3 – 10% of SMEs.

To Tajfel (1982) it seemed that there was a discontinuity between how people behaved when they related to others in an intergroup situation compared with individually. This behavioural discontinuity reflected a social discontinuity between social identity and personal identity, with the former being associated with group and intergroup behaviours.

It can be contended that this is a function of whether the individual is socially categorised (Hogg & Abrams, 1999). Categorisation is the perception that one falls into a category or group – in this case whether proprietors believe they fall into a category or group coined 'SMEs proprietors' or perhaps subgroups according to Birch's typology of SMEs (Birch 1987, 1995).

Where this is so the individual will have some affinity with that group and would have a more developed sense of social identity with that group, compared with a SME proprietor that does not identify with or even acknowledge such a group.

In intergroup contexts social psychology suggests that members seek positive distinctiveness – that is one attraction of being a group member is the sense of exclusivity or some positive benefit from belonging. This is because the positive

connotations of belonging become attributed to the self (Abrams & Hogg, 1999). Therefore for c-commerce to be attractive the benefits from being involved need to be real and able to be observed both within the group and to others (the outgroup).

Commitment to collaborative partners reflects strong personal identification with a group. Having a social identity satisfies the needs of individuals to simultaneously be unique (Snyder & Fromkin, 1980) and yet belong (Baumeister & Leary, 1995) (i.e., the issues of inclusion and differentiation).

Once collaboration has occurred the issue of maintaining the relationship is also of interest. A number of theorists from an inter-organisational relationship perspective have written about these issues (Holmlund, 2004; Holmlund & Toonroos, 1997; Lawton-Smith & Dickson, 2003). One emerging issue that is important to this relationship maintenance is the unity of the group or the perception of commitment to the group. This concept has been coined entitativity by Campbell (Abrams & Hogg, 1999). Both entitativity and social identity are characteristics of a group as perceived by individual group members. Whilst separate, each phenomenon has implications for the other.

When a group is considered to have entitativity it is considered to have purpose and coherence, is more solid and has less penetrable boundaries (Sherman, Hamilton and Lewis, 1999). The potency or power of the group high in entitativity are also perceived as being higher (Brewer, 1979) and the group is thought to have 'greater potential for positive achievements' (Sherman, Hamilton & Lewis, 1999, p. 102). These perceptions foster the positive social identity associated with belonging to the group.

The processes involved in group membership, which social identity theory sets out to explain, serves to reduce the uncertainty felt by its members. Uncertainty is aversive because it indicates a lack of control over the environment. This is especially the case where the environment – be it the macro environment or the task environment - is undergoing rapid change. Hence firms may enter into collaborative networks or c-commerce to reduce uncertainty or to at least reduce the effect of uncertainty posed by the environment, on their business.

Propositions

Consideration of the above mentioned issues leads the researchers to develop a number of propositions that require further discussion and analysis. Research regarding their applicability, is required. The following list of propositions emerge from the foregoing discussion:

- 1) Proprietors of high growth SMEs see themselves as 'belonging' to a group of high growth SMEs;
- 2) Proprietors of high growth SMEs see themselves as 'belonging' to a group of high growth SMEs and achieve esteem from 'belonging' to this group;
- 3) This perceived membership increases the propensity of SME proprietors to enter into more formal c-commerce relationships;

- 4) The social identity of proprietors of high growth SMEs is higher than that of other SME proprietors;
- 5) Proprietors of high growth SMEs see the group to which they 'belong' as being higher in entiativity compared with SMEs generally or other 'groups' of SMEs

More generally other questions that need to be considered are whether there is any regional or sectoral variation in social identity for SMEs proprietors. This potentially may have a bearing for the notion of regional and industry clusters.

Limitations

It has been suggested that the social identity approach treats the group as 'an objective and static variable, rather than as a subjective or fluid conception' (Operario & Fiske, 1999, p. 31). Others have argued that the behaviour described by social identity theory reflects the pursuit of self-gain as described by economic utility models (Rabbie, Schott & Visser, 1989). Nevertheless it is considered that the underlying motivations and cognition that precedes membership of collaborative networks including clusters and c-commerce is important and needs to be considered.

This paper seeks to identify those issues as they relate to SME proprietors particularly by way of collaborative networks and c-commerce. A strong social identity is considered to be an important antecedent to c-commerce. These issues require further exploration by way of empirical research to 'test' the propositions raised herein. Differing cultural and industry contexts also need to be acknowledged to identify the impacts of broader macro and task environmental factors.

The social identity approach focuses on interactions not as representing individuals but of individual as being part of a social group (Hogg & Abrams, 1999). It can be argued (Manstead, 1990) the study of group processes and intergroup relations that underpins social identity theory is linked to the European perspective regarding social psychology. It may be the case therefore that social identity theory is distinctly European and so may not be as applicable to cultures that tend to be more individualistic in nature, such as those that prevail in the US or Australia.

The situations surrounding SME proprietors, namely the macro and task environments, are important in that firms interact with these environments. Social identity theory reinforces the notion that social cognitions are 'socially constructed, depending on their group or collective frame of reference' (Operario & Fiske, 1999, p. 41). The issue is what is the frame of reference for different SMEs proprietors, and to what extent this reflects membership to a collective of SME proprietors or is influenced by other alliances. Perhaps other groups replace c-commerce – hence the role of portals, supply chain management, regional e-marketplaces, business associations and chambers of commerce need to be considered. These may in effect be alternatives to c-commerce.

It is important to remember that behaviour is determined by the interaction with the environment or context or a 'synergistic interaction between person and societal-cultural context (Operario & Fiske, 1999, p. 42). These macro and micro environmental issues therefore influence attitudes to and likelihood of adoption of c-commerce.

With respect to the question 'how central is social identity to involvement in c-commerce'? Hogg & Abrams (1990, p.39) question whether it is indeed a prime factor and argue that 'intergroup behaviour is quite likely to be multiply caused'. This factor is only one of many that are thought to influence c-commerce adoption. These factors are discussed elsewhere. This paper serves to focus specifically on the role of social identity theory as it pertains to c-commerce adoption by SMEs.

Conclusion

The paper introduces the social psychology surrounding collaboration around IT amongst SMEs and serves to contribute to a greater understanding of collaborative networks, which includes clustering and c-commerce. The issues outlined in this study will be used to undertake an in-depth study of SMEs c-commerce adoption with a view to assisting SMEs should they wish to transform their businesses via IT.

Social identity theory is considered to be important to the formation of collaborative networks. Just how critical remains to be seen. Nevertheless, the absence of relationships, network competence and social identity amongst SMEs act as an impediment to collaborative networks and c-commerce adoption. To date this has not been specifically researched with respect to SMEs, so this paper seeks to highlight the latter factor. As indicated future research particularly dealing with the propositions identified will be undertaken.

References

- Abrams, D and Hogg, M.A. (1999). *Social identity theory: Constructive and critical advances*. New York, Springer-Verlag.
- Australian Bureau of Statistics (2004). *Business use of information Technology 2002-03*. Canberra, Catalog 8129.0
- Baumesiter, R.F. and Leary, M.R. (1995). 'The need to belong: desire for interpersonal attachments as a fundamental human motivation', *Psychological Bulletin*, 117, 497-529.
- Birch, D. (1987). *Job Creation in America*. New York: Free Press.
- Birch, D. (1995). *Who's creating jobs?* Cambridge, MA: Cognetics, Inc.

- Bititci, U., Martinez, V., Albores, P. and Parung, J. (2004). 'Creating and managing value in collaborative networks', *International Journal of Physical Distribution and Logistics Management*, vol 34(3),251-268.
- Bode, S and Walker, E. (2003). 'Micro-business and technology uptake – why are the figures so low?' *Proceedings of the Fourth We-B Conference*, Perth WA, 25 – 26 November 2003.
- Braun, P. (2002). *Regional Connectivity and Virtual Clustering: Networking SMEs For Competitive Advantage*. Conference Letters of the 5th Global Competitiveness Institute Conference. Cairns, Australia. The Centre for Regional Innovation and Competitiveness, University of Ballarat.
- Brewer, M. B. (1979). 'Ingroup bias in the minimal intergroup situation: A cognitive-motivational analysis', *Psychological Bulletin*, 86, 307-324.
- Dyer, J. H. and Singh, H. (1998). 'The relational view: cooperative strategy and sources of interorganisational competitive advantage', *The Academy of Management Review*, vol. 23 (4), 660-680
- Engsbo, M., Saarinen, T., Salmi, H., & Scupola, A. (2001). 'A framework of Adoption of E-Commerce in Networks of SMEs'. Paper presented at the IRIS, Ulvik, Norway.
- European Community, (2000). *Business networks and the knowledge-driven economy*, Enterprise Directorate General, Geneva.
- GartnerGroup .(1999). 'Gartner Group identifies c-commerce supply chain movement: an emerging trend in collaborative web communities', GartnerInteractive. <http://gartner5.gartnerweb.com/public/static/aboutgg/presrel/>.
- Hogg, M.A. and Abrams, D. (1990) 'Social motivations, self-esteem and social identity', in Abrams, D and Hogg, M.A. (eds) *Social identity theory: Constructive and critical advances*. New York, Springer-Verlag, 28–47.
- Hogg, M.A. and Abrams, D. (1999). 'Social identity and social cognition: Historical background and current trends' in Abrams, D. and Hogg, M.A (eds), *Social Identity and Social Cognition*, Blackwell Publishers, Oxford.
- Hogg, M.A. and Mullin, B.A, (1999). 'Joining groups to reduce uncertainty: subjective uncertainty reduction and group identification', in Abrams, D. and Hogg, M.A (eds), *Social Identity and Social Cognition*, Blackwell Publishers, Oxford.
- Holmlund, M., and Toonroos, J.A. (1997). 'What are the relationships in business networks?', *Management Decision*, 35 (4), 304-309.
- Holmlund, M. (2004). 'Analysing business relationships and distinguishing difference interaction levels', *Industrial Marketing Management*, 33, 279-287.

Holsapple, C.W. and Singh, M. (2000). 'Toward a Unified View of Electronic Commerce, Electronic Business, and Collaborative Commerce: A Knowledge Management Approach', *Knowledge and Process Management*, vol. 7(3), 151 – 164.

Joo, J. (2002). 'A business model and its development strategies for electronic tourism markets', *Information Systems Management*, Summer, 59-69.

Kalakota, R and Robinson, M. (1999). *Frontiers of Electronic Commerce*. Addison-Wesley: Reading, Massachusetts.

Kramer, R. M. (1993). 'Cooperation and Organisational identification', in Murnighan, J.K. (ed) *Social psychology in organisations – Advances in Theory and Research*, Prentice Hall, 1993, London, 244-268

Lawton-Smith, H., and Dickson, K. (2003). 'Critical Factors in inter-firm collaboration', *National Journal of Technology Management*, 25(1/2), 34.

Levy, M., Loebbecke, C., and Powell, P. (2003). 'SMEs, co-opetition and knowledge sharing: the role of information systems', *European Journal of Information Systems*, 12, 3-17.

Manstead, A.S.R. (1990). 'Developments to be expected in European Social psychology in the 1990's', in Drenth, P.J.D., Sergeant, J.A., and Takens, R.J. (eds) *European Perspectives in Psychology*, 3. 183-203.

Mason, C., Castleman, T., and Parker, C. (2004). 'Knowledge Management for SME-based Regional Clusters', *Proceedings of COLLECTeR*, University of South Australia, May, Adelaide.

McCarthy, J. (1999). 'Gartner foretells of collaborative commerce'. Breaking [News:IDG.net](http://www.idg.net/idgns/1999/08/16/GartnerForetellsOfCollaborativeCommerce.shtml). <http://www.idg.net/idgns/1999/08/16/GartnerForetellsOfCollaborativeCommerce.shtml>.

Morgan, R & Hunt, S. (1994). 'The commitment–trust theory of relationship marketing', *Journal of Marketing*, vol 58(3), 20-38.

Macpherson, A., Jones, O., Zhang, M., and Wilson, A. (2003). 'Reconceptualising learning spaces: developing capabilities in high –tech small firms', *Journal of Workplace Learning*, vol. 15 (6), 259-270.

O'Keefe, M. (2001). 'Building intellectual capital in the supply chain – the role of e-commerce', *Supply Chain Management: An International Journal*, vol 6(4), 148-151.

Operario, D., and Fiske, S.T. (1999). 'Integrating social identity and social cognition: A framework for bridging diverse perspectives', in Abrams, D. and Hogg, M.A (eds), *Social Identity and Social Cognition*, Blackwell Publishers, Oxford.

Pease, W., and Rowe, M. (2005). 'Collaborative Commerce in the Tourism Industry', Paper presented at *Tourism Enterprise Strategies: Thriving – and Surviving – in an online era (TES2005)*, Victoria University, Melbourne, 11-12 July.

Poutziouris, P. (2003). 'The strategic orientation of owner-managers of small ventures', *International Journal of Entrepreneurial Behaviour & Research*, 9(5), 185-214.

Rabbie, J.M., Schott, J.C., and Visser, L. (1989). 'Social identity theory: a conceptual and empirical critique from the perspective of a behavioural interaction model', *European Journal of Social Psychology*, 19, 171-202.

Ring, P and Van de Ven A. (1994). 'Developmental processes of cooperative inter-organisational relationships', *Academy of Management Review*, 19(1), 90.

Ring, P and Van de Ven, A (1992). 'Structuring Cooperative Relationships between organisations', *Strategic Management Journal*, 13, 483-498.

Rowe, M., Cripps, H., Burn, J., Standing, C., Walker, E., and Bode, S. (2005). 'A framework for identifying the conditions for effective collaborative commerce adoption', Paper presented at *IRMA Conference*, May, San Diego.

Ryssel, R. Ritter T. and Gemunden H. G. (2004). 'The Impact of Information Technology Deployment on Trust, Commitment and Value Creation in Business Relationships', *Journal of Business and Industrial Marketing*, Vol. 19, (3) 197-207.

Scupola, A. (2002) 'Adoption issues of Business-to-Business Internet commerce in European SME', *Paper presented at the 35th Hawaii International Conference on System Sciences*, Hawaii.

Sensis. (2004). Sensis e-Business Report, viewed online http://about.sensis.com.au/media/pdf/e-Business_Report_2004.pdf
Accessed 2 December 2004

Sherman, S.J., Hamilton, D.L. and Lewis, A.C. (1999). 'Perceived entitativity and the social identity', in Abrams, D. and Hogg, M.A (eds), *Social Identity and Social Cognition*, Blackwell Publishers, Oxford.

Snyder, C.R. and Fromkin, H.L. (1980). *Uniqueness, the human pursuit of difference*. New York, Plenum.

Storey, D. J. (1994). *Understanding the Small Business Sector*. London: Routledge.

Tajfel, H. (1982). *Social Identity and intergroup relations*. Cambridge, Cambridge University Press.

Tajfel, H., and Turner, J.C. (1979) '*An integrative theory of intergroup conflict, The social psychology of intergroup relations,*' eds, W.G. Austin and A.S. Worchel, 33-47, Monterey, CA: Brooks/Cole.

Terry, D.J. (2003) Social identity theory and diversity in organisations, *Asia Pacific Journal of Human Resources*, vol. 41 (1), 25-35.

Tetteh, E.O. and Burn, J.M. (2001) 'Global strategies for SME-business: applying the SMALL framework', *Logistics Information Management*, Vol. 14 (1/2), 171-80.