December 2003

Inter-organisational Trust in Business-to-Business E-Commerce in Australia

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Abstract

This research investigated the importance, development, influences and benefits of inter-organisational trust in business-to-business e-commerce. Using a case study approach, seven informants from four Tasmania-based organisations were interviewed. The informants considered trading partner trust extremely important and a prerequisite to electronic and traditional trading relationships. The most important finding was informant's perception that trust is no more important in an online environment than in an offline environment. Collaborative relations such as communication and repeated interactions were facilitators of development of trading partner trust. Interestingly, trading partner size did not influence trading partner trust, although 'volume of business conducted' between trading partners did. Other reported influences included increased information sharing and confidence; improved relations; business growth and efficiencies such as faster payment, improved delivery and reliability. The results are intended to enhance organisational appreciation of the similarities and differences between traditional and electronic trading relationships and contribute to the growing body of knowledge on inter-organisational trust.

Keywords

Trust, inter-organisational systems, inter-organisational relationships, business-to-business, B2B, electronic commerce, e-commerce, Internet EDI, web based e-commerce, Australia

Introduction

Upon examination of the trust literature within an online business environment, there exists a large body of research regarding consumer trust, however, there is a paucity of research regarding trust within a business-to-business e-commerce environment (inter-organisational trust). From examining research conducted in this area, it appears that a lack of trading partner trust is a significant factor contributing to the slow adoption rate of business-to-business e-commerce (Keen 2002, Aschmoneit & Lenz 2002, Hsiao 2001, Costello 2001). An explanation for this is that electronic trading partners are often in different geographic locations, implying that technology alone is insufficient for successful e-commerce participation and that building and maintaining positive and trusting trading partner relationships is critical (Ratnasingham & Kumar 2000). Despite this importance of trust, only a limited amount of empirical research

exists examining the role of trust within inter-organisational relationships in an online environment (Ratnasingham & Kumar 2000).

This study explores the nature of trust, its importance, development, influences, and benefits, to encourage the future adoption and participation in business-to-business electronic commerce.

Literature Review

Trust

The concept of trust has received interest from many disciplines including psychology, sociology, history, economics, management, marketing, law, economics, information systems and computer science (Lewicki & Bunker 1996, Sheppard & Tuchinsky 1996, Mishra 1996, Keen 2002, Kim 2001) with each discipline viewing trust from its own unique perspective (McKnight & Chervany 2000, Lewicki & Bunker 1996, Ratnasingham, Ruighaver, & Sandow-Quirk 1998).

Trust can occur at an *inter-personal* or *intra-organisational* level (Cummings & Bromiley 1996, Lewicki & Bunker 1996, McKnight & Chervany 1996), between organisations (*inter-organisational*) (Allen, Colligan, Finnie, & Kern 2000, Aschmoneit & Lenz 2002, Doney & Cannon 1997, Karahannas & Jones 1999, Ratnasingham & Klein 2001, Smeltzer 1997) and in relation to *technology* (Huang & Janz 2002, Ratnasingham & Pavlou 2002, Ratnasingham 2001). The various studies of inter-organisational trust in e-commerce divide trust into two distinct camps. For example, EDI studies by Ratnasingham (2001, 2002a) within the automobile industry found two types of trust: *soft* and *hard*. *Soft* trust referred to trust in the trading partner relationship and *hard* (or technology) trust referred to integrity issues regarding information technology and infrastructure.

Inter-organisational trust is the main focus of this research and is defined by Ratnasingham and Klein (2001:770) as:

> The confidence of an organisation in the reliability of other organisations in a possibly risky situation regarding consistent competent, dutiful honest actions.

Importance of Trust

Trust has emerged as an extremely important aspect of business-to-business e-commerce (Allen et al. 2000, Ba, Whinston, & Zang 1999, Hart & Saunders 1997, Ratnasingham & Klein 2001, Hsiao 2001, Keen 2002, Aschmoneit & Lenz 2002). Ratnasingham et al. (1998) and Ratnasingham (1998a, 1998b) attribute this to the impersonal nature of the online setting and the distance between electronic trading partners. They explain that the absence of physical proximity, handshakes and body signals, lack of face-to-face interaction and capacity for interruption and feedback makes trading partner trust even more important in an online environment.

Others see a lack of inter-organisational trust as a barrier to business-to-business e-commerce adoption (Aschmoneit & Lenz 2002, Keen 2002, Ratnasingham 2001, Hsiao 2001). In support of these claims, a market research study in March 2001 by Jupiter Media Metrix Inc. found that 45% of managers studied, blamed a lack of trust for the slow adoption rate of business-to-business e-commerce (Costello 2001).

Karahannas and Jones (1999) found, in a study of 20 organisations with inter-organisational systems as part of strategic alliances, that trading partner trust was not always considered relevant to inter-organisational systems development and use. Similarly, Doney and Cannon (1997) investigated the influences of supplier selection, and found the buying organisations within the study were not influenced by trust, but were more interested in their supplier's delivery performance and relative price/cost. The results indicated that trust operated as a qualifier, not a winner, increasing the likelihood that buyers anticipate doing business with the supplier.

Trust Development

Shapiro, Sheppard, and Cheraskin (1992) proposed a three-stage model for the development of trust in a business environment, consisting of three stages of trust development: deterrence-based, knowledge-based and identification-based trust. Lewicki and Bunker (1996) believe that trust develops gradually as the parties move from one stage of the development process to another. Deterrence-based trust occurs when the perceived cost of discontinuing the business relationship or the likelihood of retributive action, outweigh the short-term advantage of acting in a distrustful way. Knowledge-based trust is grounded in the knowledge of the other trading partner (trustee), allowing the truster to understand and predict the behaviour of the trustee. Identification-based trust is the highest order of trust and assumes that one party has fully internalised the others' preferences. Support for deterrence-based trust is mentioned in studies by Shapiro et al. (1992) and Sheppard and Tuchinsky (1996) who propose the threat of punishment is likely to be a more significant motivator than the promise of reward. However, Lewicki and Bunker (1996) explain that deterrence based trust is not only grounded in the fear of punishment in violating trust, but also in the rewards derived from preserving it. Studies by Ratnasingham et al. (1998) and Ratnasingham (1998a, 1998b) also support the three-stage model.

Influencing Factors

A number of factors influencing trust have emerged from the literature, including reputation, size and communication. Doney and Cannon (1997), Song and Zahedi (2002), Jarvenpaa and Tractinsky (1999) report that reputation and size of an organisations' valued business assets provide assurances of ability, integrity and goodwill and are mentioned frequently with respect to buyer-seller relations and online retail transactions. Shapiro et al. (1992) suggest that the threat of loss of reputation and resulting loss of business is an effective deterrent and Burt and Knez (1996) propose that the possibility of third-party gossip increases cooperation and trust.

The communication process is another significant facilitator of trust (Shapiro et al. 1992, Ratnasingham 2001, Ratnasingham 2002a). An important dimension of communication is frequency of interaction; this acts as a mediator of distrustful behaviour that can potentially jeopardise future benefits (Sydow 1998). Shapiro et al. (1992) and Doney and Cannon (1997) advocate repeated interactions that allow parties to better interpret prior outcomes, providing a basis for assessing predictability. While Hardy, Phillips, and Lawrence (1996:69) propose that inter-organisational "trust grows out of a communication process in which shared meanings develop, to provide a foundation for non-opportunistic behaviour". Collaborative communication through joint projects and goals were yet another dimension of communication identified by Shapiro et al. (1992) and Smeltzer (1997) as important vehicles for increasing the level of perceived trust between trading partners.

A third factor is the disclosure of confidential information. Doney and Cannon (1997) suggest that buyers tend to have greater trust in suppliers who share confidential information in that it provides a signal of good faith to the buying organisation. Willingness to share this information demonstrates openness and reinforces trust (Hart & Saunders 1997). Another dimension of communication is the length of the relationship. Doney and Cannon (1997) indicate that the longer the relationship, the larger the investment made by trading partners over time, and the easier it is to predict future behaviour, thus increasing trust in a partner.

Benefits of Trust

The combination of these influencing factors has resulted in benefits to the organisations involved in the inter-organisational relationships. Ratnasingham and Klein (2001) established three perceived benefits: economic, personal and symbolic, corresponding to the three types of trust depicted in their trust model. Perceived economic benefits include cost savings from less administrative costs, timeliness from speed and automation, and simplicity from structured business processes (Ratnasingham & Klein 2001, Shapiro et al. 1992). Perceived personal benefits include: competitive advantage, reduced lead times, increased productivity and customer satisfaction (Ratnasingham 2002b). Symbolic perceived benefits of trust include: building/enhancing reputation, increased commitment and business stability, competitive edge and a strategic outlook (Ratnasingham 2002b). In addition, Hart and Saunders (1997) state that trust increases the probability of a trading partner wanting to expand the amount of information sharing and exploring mutually beneficial arrangements.

Research Method

Specifically, the following three main research questions are the focus of this paper.

1. Is inter-organisational trust important in business-to-business e-commerce?

2. What factors influence inter-organisational trust in business-to-business e-commerce?

3. What are the benefits of inter-organisational trust in business-to-business e-commerce?

This research is subjective in nature and takes an interpretivist stance to explore informant's personal experiences, perceptions and opinions in relation to trust in their electronic trading partners. Semi-structured interviews and case study techniques were used.

The selection of informants for the interview procedure was purposeful. Four Tasmania-based organisations were selected on the basis of their electronic trading relations with their trading partners. These four organisations were from government, wholesale, manufacturing and information services sectors. Seven upper-level managers were interviewed individually utilising a semi-structured interview protocol. Interviews were approximately one hour in length. Each interview was tape-recorded, with the consent of the informant and transcribed in accordance with Yin's 24-hour rule (Yin 1994). The interview protocol was pilot tested by one additional business manager with similar attributes to the informants and two academic staff members for flow, timing, content and comprehensibility. Based on feedback from the pilot test, suggested refinements were made to the interview protocol.

The data was analysed using a combination of a top-down/bottom-up approach, based on three stages of coding: open, axial and selective. This approach is similar in nature to the approach adopted by Karahannas and Jones (1999) who explored theoretical and originally unanticipated themes simultaneously. Informants were initially questioned regarding their

employment and organisational details, these can be found within Table 1. The remaining questions asked were closely aligned with the three research questions.

To address member validity, all seven informants were provided with a copy of their interview transcript and a copy of the research findings. Each was asked to ensure that these accurately reflected their beliefs and perceptions. All informants indicated agreement with the interview transcript and the research findings. To facilitate replication of the study by future researchers, a comprehensive case study database was developed to allow other to follow the path from the initial research questions, through the coding process, and to the final conclusions (Yin 1994, Babbie 2002, Benbasat et al. 1987). In this way, the relationships established in the early stages of data analysis and their subsequent refinements throughout the various phases of coding were documented, to provide a chain of evidence.

Findings

In order to facilitate discussion, and for ethical reasons, organisations who participated in this research are referred to as organisation A, B, C and D and the individual informants are referred to by their job title. A profile of each of the organisations is provided in Table 1. The four organisations utilise: one intermediated, one intermediated/direct and two direct e-commerce systems. For example, organisation A utilises a web-based intermediary system to import its supplier's catalogues from the intermediary's e-commerce application. Orders are collated and entered into organisation A's purchasing system and sent through the intermediary system, where the order is placed. The supplier also updates the status of the order on the intermediary application, allowing organisation A to view the status of the order. Two other organisations have direct e-commerce systems and choose not to use an intermediary, with the systems consisting of secure online and interactive ordering and account facilities that are developed and maintained internally. While organisation B utilises two separate e-commerce systems one provided by its supplier and one by its buyer, one intermediated and one direct. The informants interviewed were each from upper managerial positions and were chosen as those who were closest to the trading partners and the e-commerce system.

Organisation	A - Government		B - Wholesale	C - Information Services		D – Manufacturing	
Type of E-Commerce System	Intermediated		Direct & Intermediated	Direct		Direct	
Informants Position in Organisation	Supply Chain Manager	Acting Supply Chain Manager	Managing Director	Director of Information Systems	Marketing Manager	Group Logistics Manager	Sales Manager
Years with organisation	17	12	12	14	7	18	
Years in current position	3	12	12	3	5	1.5	
No. of employees	350		8	42		500	
Years in operation	70		147	122		132	
No. of traditional trading partners	1800		250	3000		3000	
No. of electronic trading partners	2		2	695		15-20	
Location of electronic trading partners	Local & interstate		Local, interstate & international	Local & interstate		Local, interstate & international	
Trade electronically with:	Suppliers		Suppliers & Buyers	Buyers		Distributors	
Pre-existing relationship?	Yes		Yes	Yes		Yes	
Length of relationship (years)	4-7		7-147	Up to 122		Up to 40	
Years system utilised	2		D: 6 months, I: 2 yrs	2		3	

Table 1. Profile of Informants and Organisations

Data analysis revealed a number of trust-related issues. These include the importance, locus and influencing factors of trust. Each of these issues is discussed separately below, and then the benefits associated with inter-organisational trust are reported.

Importance of Trust

All informants perceived trust to be "extremely important" in their electronic trading relationships. For example the Sales Manager perceived trust to be so important that his organisation "couldn't trade (electronically)… without that level of trust".

In support of this the Supply Chain Manager explained that trust is extremely important within trading relationships in general, particularly within small sized markets such as the local Tasmanian market, stating:

> In order to operate in a closed or a small market like Tasmania…companies must have a certain degree, no a high degree of honesty or they simply go out of business. Without everyday normal honesty in their dealings then they are going to fall down and they are not going to continue. So I believe that to be in business honesty is essential and I take that as a given.

Similarly the Supply Chain Manager perceived trust as being a prerequisite to trading electronically and also that this trust was implied by the invitation to trade electronically:

> I don't think that we would ever have entered into any agreement…with anyone that we had had poor dealings with or had been found to be unreliable, in either: the delivery of orders or their timeliness, responses to us, pricing, or anything like that, because the whole thing would have collapsed. I think that the high degree of trust was implicit in getting it up and running to start with.

Interestingly, trust was seen as a pre-requisite to conducting business relations with trading partners both online and offline. The following statement by the Group Logistics Manager supports this:

> It (trust) is a prerequisite to dealing with any customer. It is important to recognise that you are trying to make a differential between a B2B is different to a traditional or vice versa and that's not the case. It is just a different method of trading. The same conditions apply. We wouldn't put an assessment on someone that wanted to come to us and B2B trade, any differently than if we wanted them to sell to them retail. We wouldn't even make a distinction between the two.

The Acting Supply Chain Manager also expressed that:

> It (trust) is important whether you are dealing with them (trading partner) manually or electronically.

It can be seen from the data analysis that most of the informants indicated that trust in their trading partners existed before development of the e-commerce system and that it remained constant - indicating that the **method** of trading had changed - not the relationship. The following statements demonstrate this:

> It (trust) hasn't been lost at any stage. I can't say it has been gained either, I think because we had such good relationships anyway, its just remained as a good relationship, so we haven't lost or gained, we had just had such a firm relationship before…I haven't gained any more trust since electronic trading. (Acting Supply Chain Manager)

> The method of dealing with them has changed, not the integrity and ethos that goes around it. (Supply Chain Manager)

> I think…there is no more trust than if you were dealing with them normally, its like that level of trust should be the same. (Managing Director)

Also, when the Managing Director was asked whether trust in his electronic trading partners was any different to his traditional trading partners he replied, "no…because they are still traditional trading partners really, the order might come over some fancy system…" From this it can be seen that the Managing Director did not think that the e-commerce system should have affected his trust in his trading partners.

Locus of Trust

A common theme that emerged from the data analysis was that informants appeared to trust the *orders* and *people* within their trading partner's organisations, rather than the system itself. In all, trust in these loci surfaced:

- *Individual (i.e.* person*)*
- *Electronic trading partner* (i.e., organisation),
- *E-commerce system/technology*

- *Information* or *orders* within the e-commerce system.

Evidence of these is provided in these statements:

> Trust of the client and the person, and the people they are, and the type of orders that they give us is still one hundred percent, but the system…I have some doubts about. But as a client themselves, the trust is perfect. And that trust is not built up because of something that spits out of my computer…so there is a huge amount of trust. But it doesn't flow through to the ordering system and the electronic commerce system. (Managing Director)

> Like with most systems…they are only as good as the people at the other end, you'd definitely need a degree of trust and select your people quite carefully. (Group Logistics Manager)

> Ultimately I think trust, where it could be lost would not be as a result of what's happening with the information system, I think it would ultimately have to come back to what's actually done in a human terms. (Marketing Manager)

Clearly, these informants differentiate between trust in the e-commerce system and trust in an **individual**, stating that trust in the individual is more vital than trust in the e-commerce system.

In addition, the Acting Supply Chain Manager introduced the concept of trust in **information**, indicating that their electronic trading partner would "have to trust us and the information that we give them, because that is what they are acting on", indicating their trading partner would need to trust both the trading partner and the information they provided.

A number of factors that impacted on management of trust in the inter-organisational relationship emerged from the interviews.

Influencing Factors

Informants reported development of trust could be facilitated through certain interactions. These interactions were most commonly collaborative in nature, as means of facilitating trading partner trust. For instance the Acting Supply Chain Manager commented:

> Trust develops over time just from your interaction with them, their performance, their willingness to work with you, if there is a problem, so trust develops over time and a lot of that's just based on good communication between the two of you and that's what's happened in this case.

Other informants also emphasised the importance of traditional communication in the development of trust. For example, the Director of Information Systems commented, "traditional communication is the only way to achieve that (trust)" and the Director of Information Systems stated his organisation "still holds the manual forms of communication as being important for building relationships".

In support of this the Managing Director expressed that "trust is not built up because of something that spits out of my computer, but because I speak to them every week". In addition, the Acting Supply Chain Manager explained that interacting and communicating with trading partners is important as it allows the ability to "understand any problems that they are having at their end or what they'd like to see done and we can tell them any problems we can see".

When asked whether factors such as the trading partner's reputation or the length of pre-existing relationship had influenced their decision to trust, informant's responses were mixed. For example the Acting Supply Chain Manager indicated that their trading partner "had a good reputation" and that this "reputation came into it (their decision to trust)", in contrast the Director of Information Systems indicated that reputation "didn't have any bearing…any of our clients can use it".

Interestingly, all of the informants believed that the size of the trading partner was irrelevant to their decision to trust.

For example the Acting Supply Chain Manager explained:

> It doesn't really matter what size they are or anything; I mean we want everyone we deal with to come on (to the system). So size wasn't a determining factor of who we'd get on.

To further illustrate this perceived irrelevance of trading partner size to the decision to trust, the Sales Manager stated "we've got some of our biggest company's using it, and we've got some of our smallest ones". Similarly the Supply Chain Manager explained that one of their trading partners is "a very small company with just a couple of employees, whereas <Other Trading Partner Name> is a national organisation with thousands".

After considering whether their trading partners size had influenced their decision to trust their trading partners, some of the informants mentioned that their trading partners volume of transactions influenced their decision to trust. The following statement reflects this.

> If someone came and said hey we want to be part of <Intermediary Name> and we are going to give you orders worth $500 bucks a year, we would say forget it (Marketing Manager).

In support of this the Acting Supply Chain Manager indicated that the volume of trade, the nature of the pre-existing relationship, the past that they had shared and a willingness to adopt e-trading were all seen as being favourable influences. The Acting Supply Chain Manager explained these influences further below:

> The length of our relationship, the length of their existing contracts and a good relationship, that we'd had with them, that would have to be the big one and the volume of our business with them…I think our history…as I say the length of time we dealt with them, the length of time we are still to deal with them, their willingness and they are very keen to go down that path (e-trading) and look at it.

Benefits of Trust

When considering the outcomes of trading partner trust, informants asserted that trading partner trust had resulted in a number of organisational benefits: efficiencies, business growth, faster payment, increased information sharing, increased confidence, good relations, improved delivery and reliability.

For example the Director of Information Systems explained, "the more they trust us, the more (information) we will get out of them… if we trust them with information about what's going on with a file, they will trust us with more information". While the Acting Supply Chain Manager indicated that trust results in "more efficient service and for us possibly paying them a lot quicker".

The Group Logistics Manager indicated that a benefit of trust in his trading partners was:

> Confidence in dealing with them, confidence in their ability to deliver what they are asking for and it obviously gives us confidence in being able to promise what we can deliver to people…down the chain.

Furthermore the Group Logistics Manager asserted that trust in their trading partners resulted in: "a partnership approach, growth in business, getting it right in the market". This informant elaborated that:

> If you are dealing with a retail based organisation…they are a lot closer to the consumer than you are…a classic example of where the manufacturers talk straight to their service sales counters, so they know exactly what's selling in their products every day. They (the buyer) trust that supplier backwards…and it's going to improve delivery and improve reliability and improve information flow.

This indicates that the purchaser needs to trust suppliers to provide them with valuable supply chain information, which in turn would result in improved reliability, delivery and information flow.

Discussion

The current findings of this research support existing literature (Ba, Whinston, & Zang 1999, Hart & Saunders 1997, Ratnasingham & Klein 2001, Hsiao 2001, Keen 2002, Aschmoneit & Lenz 2002) that inter-organisational trust within an electronic environment is extremely important. Within the current study, trading partner trust was perceived as a pre-requisite to trading electronically. This supports a study by Ratnasingham (2001) who found that informants believed trading partner trust to be essential in the adoption of business-to-business e-commerce. However, this is in contrast with Karahannas and Jones (1999) and Doney and Cannon (1997) who found that trading partner trust was not always considered relevant to inter-organisational systems development and use, and trust was seen as a qualifier - not a winner.

Again, in contrast to the literature, the informants perceived trust to be *equally* as important in an online environment as an offline environment - regardless of the method of trading. This is an extremely important and interesting finding of this research. This conflicts with Ratnasingham et al. (1998) who indicate that trust is even more important in an online environment, due to the impersonal nature of the online setting. A possible explanation for these differences in findings may be that most organisations in this study were located in the same geographic region and so could depend upon physical proximity, handshakes and body signals. Most of these organisations communicated with their trading partners on a regular basis, both face-to-face and electronically, whereby the speculated increased need for trust in an online environment may not have applied.

The findings revealed trading partner trust existed before the e-commerce systems were established and that trust remained relatively constant despite the development of the e-commerce system. These findings conflict with Smeltzer (1997) whose informants perceived that the sharing of technical advances (e.g. the e-commerce system) facilitated trust, and Shapiro et al. (1992) who indicated taking on joint projects and goals increases trust.

An explanation for this constancy of trading partner trust may be due to the fact that the organisations already had mature relationships at the time of the development of the e-commerce system. This could be an indication that some of the organisations may have reached the final stage of trust development (identification-based trust) as proposed by

Lewicki and Bunker (1996). They state that not all relationships may evolve through to the last stage of trust development, whereby these organisations may have reached a 'peak' in their trusting relationships.

Different placement of trust emerged from the interviews, these being the *individual* (i.e. person)*, electronic trading partner* (i.e., organisation), e-*commerce system/technology, and the information* or *orders* within the e-commerce system. These different trust loci emerged despite informants specifically being asked about *trading partner trust.* Here it could be seen that the informants perceived that trust was important in a number of areas, not just their trading partners.

The findings support those of Huang and Janz (2002), Ratnasingham (2001) and Ratnasingham and Pavlou (2002) who suggest that trust can be seen from two perspectives: trading partner trust between human actors (or soft trust) and trust in e-commerce and technology assurances (or hard trust), whereby each locus of trust found fitted within these boundaries.

Collaborative relations such as communication and repeated interactions were perceived to be facilitators of the development of trading partner trust. These findings support Shapiro et al. (1992), Sydow (1998) and Hardy et al. (1996) who state that communication is a means of facilitating trading partner trust and those of Doney and Cannon (1997) and Shapiro et al. (1992) who state that repeated interactions facilitate trust.

Contrary to McKnight et al. (1998), Doney and Cannon (1997), Jarvenpaa and Tractinsky (1999) and Smeltzer (1997) who propose trading partner size is a influence of trading partner trust, the findings in the current study revealed trading partner size was not an influence. The new notion of "volume" of business between trading partners was suggested as an influence of trading partner trust. Support was also found for Smeltzer (1997), where having a good history and past performance was perceived as a trust-enhancing factor.

In support of Ratnasingham and Klein (2001) and Ratnasingham (2002b), various economic, personal and symbolic benefits of trading partner trust emerged from the data analysis. For example: increased information sharing, increased confidence, good relations, business growth and efficiencies such as faster payment, improved delivery and reliability. Increased information sharing was also supported by Hart and Saunders (1997) who indicate that trust increases the probability of a trading partners willingness to expand the amount of information sharing.

Limitations

It is important to note that the researchers of this study are not attempting to generalise the results of this study to other organisations conducting business-to-business e-commerce. It would be unrealistic to expect that the perceptions and experiences of the seven informants within four organisations could be generalised to other individuals and organisations using business-to-business e-commerce.

A potential limitation of this research is that each of the organisations studied had pre-existing relationships with their trading partners before moving to electronic commerce. In addition, it appeared that most electronic trading continued to communicate face-to-face after the introduction of the e-commerce system, thus using traditional methods in combination with electronic trading methods. These factors may also have affected the findings of this research.

Implications for Practice

This research has practical implications for ways in which electronic trading partners might increase inter-organisational trust. Since trading partner trust is essential to developing and maintaining successful trading partner relationships, trading partners should try to facilitate such trust by fostering a level of trust prior to moving to an e-commerce environment, and for those relationships that are exclusively electronic in nature by encouraging collaborative activities such as repeated interactions and traditional communication.

Implications for Future Research

It is suggested that future researchers investigate further the issues explored in this study, within organisations who:

- Only trade electronically

- Have no pre-existing trading partner relationships

- Are geographically distant and face-to-face interaction is minimal, and

- Are contemplating adopting business-to-business e-commerce

Longitudinal studies of development of inter-organisational trust would also be of value.

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