## Risks in Low Trust Among Trading Partners in Electronic Commerce

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Most scholars have linked trust and risks when defining trust. Alternatively, research relating to electronic commerce security focuses on issues relating to the technology. This paper discusses trust and risk in business to business electronic commerce from a management perspective and risks relating to business management risks arising from low trading partner trust. Factors such as opportunistic behaviour, uncertainty, coercive power, and conflict among trading partners will be discussed as part of relational and performance risks.

Keywords: inter-organizational relationships, trust, relational risks, performance risks, opportunistic behaviour, uncertainty, coercive power and conflict.

#### Introduction

Trust is a critical element of all human relationships, particularly when economic value of business to business relationships is in question. In recent times we have witnessed a marked escalation of interest in the subject of trading partner trust [Barney and Hansen, 1994; Creed and Miles, 1996; McAllister, 1995]. This is not surprising because, on one hand, the general level of trust seems to be eroding in this society [Fukuyama, 1995], due to factors like corporate downsizing, increasing diversity of the population, and general suspicion about the characters and doings of political leaders. On the other hand, we seem to be entering an age demanding more trust within organizations [Handy, 1995; Gulati, 1995].

There are various conceptualizations of trust, and most of them are associated with risk. For example, Mayer, Davis and Schoorman (1995) define trust as: "the

willingness of a party to be vulnerable to the actions of another party, based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party", [Mayer et al., 1995:712].

Some scholars believe that only in risky situations does one need trust [Coleman, 1990; Deutsch, 1960], and to trust someone is to take risk with the trustee [Sable, 1993]. Hence, the main objective of this paper is to highlight the type of risks that can exist as a result of low trading partner trust and how high levels of trading partner trust can actually reduce these risks.

Although, most popular accounts of electronic commerce are in the area of business to consumer electronic commerce, increasingly business to business electronic commerce is becoming a key issue in businesses [Keen, 1997]. Most organizations making an attempt to stand and survive in the global competitive market are implementing electronic commerce systems without properly integrating and considering the security consequences [Raman, 1996]. Further the findings of a recent electronic commerce survey that examined the adoption of electronic commerce in Australia and New Zealand indicated that there is still an initial slow growth of Internet business to business electronic commerce within the Asia Pacific region as compared to United States. This is due to perceived risks in the security of business to business electronic commerce transactions and trust of the trading parties [KPMG, 1999]. While technology seems to provide sufficient

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safeguards such as; digital signatures, encryption, web seal assurances and standards that provide technology based security and trust mechanisms at present, there seems to be a perception by businesses that transactions conducted specifically via the Internet are insecure and unreliable [Bhimani, 1996; Raman, 1996]. It seems as if despite the technical assurances, trading partners in business to business electronic commerce do not trust the 'people side' of the transactions. Parkhe, [1998] suggests that this is due to two types of uncertainties; uncertainty regarding unknown future events, and uncertainty regarding trading partners responses to future events. It is in this environment of dual uncertainty that trust becomes important in business to business electronic commerce.

Similarly Ring and Van de Ven [1994], identified two types of risks related to uncertainties. They include performance risks that arise from 'uncertainty regarding future states of nature', and relational risks from 'uncertainty whether trading parties will be able to rely on trust'. Thus, the issue for adopting business to business electronic commerce is no longer in the reliability of the technology but reliability of the trading parties. As Keen [1997] stated "we are moving from an IT economy to a trust economy".

Previous studies relating to the level of trustworthiness have identified trust to be low, moderate and high.

- Low trust refers to primary reliance on rational prediction (for example monitoring, incentives and penalties to induce cooperation) with small elements of affect-based belief in moral character.
- Moderate trust refers to significant emphasis on both rational prediction and affect-based belief in moral character.
- High trust refers to primary reliance on affect based belief in moral character and some reliance on rational prediction [Wicks et. al., 1999].

#### Relational Risks

The logic of risks in uncertainty and probability occupies an important position in defining trust. The trustor assesses the trustee's level of goodwill based on factors such as the trustee's good faith and integrity [Mayer et al., 1995]. Goodwill is the trustor's belief about the trustee's intention as well as his willingness to act in the interests of the trustor. Alternatively, in the case of opportunism, it is a lack of goodwill. Since a perception of goodwill alludes to a high probability that a trustee has good intentions in the relationship and will carry out in good faith whatever was expected. Therefore, the probability of him being opportunistic will be low as relational as relational risks will only occur when trading partners do not fully commit to the relationship [Das and Teng, 1998].

Relational risk are due to negative outcomes that arise from cooperative relationships addressing possibilities and consequences that trading partners in inter-organizational relationships do not fully commit themselves to joint efforts. In other words, it refers to concerns that organizations may not work towards the mutual interests of trading partners, and that they may not cooperate in a manner specified in the trading partner agreement or as expected by their trading partners. The motives behind such discordant behaviour can be either rational or irrational. Rational motives refer to self-interest seeking behaviour by economic actors or opportunistic behaviour [Williamson, 1993]. Such actions could be individually rational so that all trading partners in inter-organizational relationships, given a chance could tend to maximize their own interests at the cost of the partners. In an effort to control self-interest seeking behaviour, trading partners are compelled to negotiate and write explicit legal contracts that generally are time consuming and expensive.

#### Performance Risks

Ring and Van de Ven [1992] used the term commercial risks, technological risks and corporate strategic risks to relate to performance risks. Despite a variety of terms, the essence of risk inherent in strategies relating to the achievement of strategic objectives does not necessarily depend on the efforts of an organization. The term 'performance risk' is used to account for the possibility and consequences that the objectives of inter-firm alliances are not successfully achieved, although all trading partners cooperate fully. Performance risk has to do with hazards of not

achieving the performance objectives of a trading partner relationship [Das and Teng, 1996]. It relates to 'competence' as in the probability that the trustor believes the trustee has the skills and abilities to carry out certain actions and achieve desired results [Gabarro, 1978]. Unlike the dimension of 'goodwill' which is about the trustee's intention and integrity, competence refers to the trustee's capability and technical qualifications. Similarly, other terms relating to competence include: 'ability' and 'expertise' [Mayer et. al., 1995].

### Opportunistic Behaviour

Most transaction cost economists posit that the governance structure of a trading partner relationship is determined by the transaction costs of the deal. Trading partners tend to behave opportunistically to maximize their own benefits while plunging into collective efforts. Clearly, the opportunistic behaviour of trading partners is a major source of transaction costs in inter-organizational relationships. Williamson, [1975:26] defined opportunism as 'self-interest seeking with guile' results in expensive negotiating ex ante and monitoring costs ex post [Hennart, 1988]. Thus equity alliances such as legal contracts, and trading partner agreements are used to control opportunistic behaviour. The general findings indicate that when the available chances and costs of opportunistic behaviour are high, equity alliances will be the preferred format [Gulati, 1995].

According to Williamson [1975], basing on the Transaction Cost Economist (TCE) theory suggested that one central assumption of transaction cost economists is the belief that the agent in any principal-agent relationship is not to be trusted, and that the risk of opportunism is high. Further, it included not only the more blatant forms of cheating, but also the less obvious but clearly calculated methods of misleading, distorting, disguising and confusing [Hill, 1990].

Business managers often do act on the basis of trust, but the difficulty in identifying trustworthy agents was so great that organizations had to structure themselves as if all agents could not be trusted. Thus there was a need to monitor detailed contracts to protect against opportunistic behaviour. These detailed contracts were in the form of legal trading partner agreements which were time consuming and costly.

Alternatively, Hill [1990] suggested that it was possible to reduce transaction costs through a reputation for non-opportunistic behaviour. While it is difficult to observe the difference between distribution of opportunistic versus cooperative behaviour. Alternatively, we could select trading partners whom we identify will cooperate. As each organization is surrounded by a system of markets, including debt and equity capital markets, material and labour input markets, and goods and services output markets. Opportunistic actions within a single market might yield short term benefits, but there would be a long term cost in the sense of a lack of trust that might inhibit future acquisitions of cost reducing and/or quality enhancing assets. Thus "reputation has an economic value" [Hill, 1990:505]. Reputation plays an important part in determining the willingness of others to enter into a trading partner relationship and is a result of trustworthy behaviour.

## Uncertainty

The main concern in a trading partner relationship is the reliance on cooperation among trading partners. Uncertainty is the fundamental mental problem of cooperation. Trading partners in inter-organizational relationships are often characterized by inherent instability arising from uncertainty regarding a partner's future behavior [Parkhe, 1998].

In the case of electronic commerce adoption and integration, organizations may face great uncertainty simply because they lack the knowledge, information, skills and resources to understand and moderate the effects of their environments on themselves.

According to Miller and Shamsie, [1999] there are three types of uncertainties. They pertain to: (1) general external events; (2) cause effect relationships between an organization and its environment and (3) decision outcomes. They are described as:

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Environment state uncertainty represents an inability to forecast industry or market events, and the demand. For example, uncertainty may arise from changing customer preferences, intense competition, and can be manifested by market share volatility and shrinking demand.

Organizational effect uncertainty represents an inability to predict the effect of any given environmental state or event on one's own firm; it results in part from the lack of skills, knowledge and resources that could help managers understand or influence market reactions. According to Milliken, [1987:137] "if state uncertainty involves uncertainty about the future state of the world, then effect uncertainty involves uncertainty about the implications of a given state of events in terms of its likely impact on the organization's ability to function in that future state". This was true of EDI adoption and integration, where 'hub and spoke wheel' relationship between a powerful buyer and numerous smaller suppliers in the automotive industry has left buyers who have a range of technical, creative knowledge, control and power over their markets, that they confront relatively little effect uncertainty. Hence, buyers possess the knowledge, skills or power even in a competitive setting to handle complexity and ensure success of many product variations. Alternatively, smaller suppliers by contrast confront more effect uncertainty because they have less knowledge of, or control over their competitive environments. These firms are thus compelled to focus on their more limited resources with a few familiar product varieties and customers they understand best.

Decision response uncertainty represents an inability to predict the consequences of a specific decision. It derives from the ignorance and risks perceived in making individual decisions. This uncertainty depends on the qualities of a decision-maker and the specific decision in question. The more costly a potential mistake, the greater the perceived risk and the higher the level of response uncertainty.

#### Conflict

Conflict may happen when trading partner A is likely to use coercive sources of power, when trading partner

B does not cooperate with him, then B will have more frequent and intense conflicts with A. Thus, imbalance in power could lead to conflict. Conflict between trading partner A and B is influenced by rewards (that are reward sources of power) and deprivations (that are coercive sources of power) that B perceives A to possess. Conflict between trading partners A and B is inevitable when A and B are interdependent. This is particularly true in the case of Ford Automotive company when given the incentive to produce in large quantities, manufacturers found that it was necessary to pressure dealers to accept more cars than they desired during slow times. Thus, an inherent conflict situation was built into the system because the manufacturer's aim in maintaining profits resulted in declining profits for the dealers. Furthermore, the issuance of threats usually of an economic nature in the case of intra-channel friction, is generally a pathological response to conflict, because threats tend to elicit threats, thus increasing the degree of conflict. When one party establishes the use of coercion, the other is likely to respond in kind, intensifying conflict rather than resolving it.

# Disadvantages of Coercive Power among Trading Partners in Electronic Commerce

Coercive power of A over B is based on power that B begrudgingly yields to A because B believes that A has the ability to punish him if he does not cooperate. Automobile manufacturers possess a set of punishments they can use if suppliers do not cooperate. The more likely they are perceived to use these punishments, the stronger will be their coercive sources of power. Coercive sources that an automotive manufacturer may exercise include, slow delivery of vehicles, slow payment on warranty work, unfair distribution of vehicles, turndowns on warranty work, threat of termination and bureaucratic red tape.

Coercive power is referred to as negative power and is due to asymmetric dependence of the trading partners. Coercive power is applied to smaller suppliers who cooperate defensively with their powerful buyers and are forced to implement EDI to the extent where it is absolutely necessary. Hence, powerful buyers only consider short-term trading partner relationship which is similar to deterrence based trust. An example of coercive power is when buyers threaten to pass additional processing costs on to their uncooperative suppliers. These suppliers will cease doing business, as their trading contracts do not get renewed unless the supplier adopts EDI.

## The Impact of High Trading Partner Trust and Persuasive Power

Persuasive power, help build trust and long term relationships [Hart and Saunders, 1997]. Powerful firms may arrange with a Value-Added-Network (VAN) company to waive minimum fees for their smaller suppliers or offer discounts to their new trading partners. High costs in implementation create a barrier to EDI adoption as the cost includes the operational costs, contractual costs, transmission costs and coordination costs. Persuasive power occurs when trading partners are aware of the fullest potential of the technology. Computer integration is a long-term investment process including hardware, software, internal computer networks and hence smaller suppliers often lack the knowledge and awareness of electronic commerce adoption and integration when dealing with a coercive powerful buyer which is negative for trading partner trust. Alternatively, if properly informed how to achieve automation and improve internal processing, these investments complement EDI and result in greater inter-organizational coordination. Hence, it encourages the development of high trust which turn leads to information sharing and low risks such as opportunistic behaviour and conflict. Smaller suppliers will then explore new mutually beneficial arrangements related to EDI that will further improve inter organizational coordination. Therefore with persuasive power firms become tightly coupled, trust is reinforced during implementation of a transaction set and goodwill is increased.

#### **Conclusions**

This paper has identified the importance of trust in relation to risks among trading partners in electronic commerce adoption and integration. It is generally believed that trust is valuable because it allows people to dispense with detailed contracts and monitoring in various transactions. High trust results in lower cost, higher efficiency, minimum contracting and monitoring in transactions connote a high level of risk taking as trust is the mirror image of risk, a high trust situation suggests low perceived risks. Long term trading partner relationships can only be sustained via positive trust. However, the use of power among trading partners may impact them for a short period of time. In the long run due to reputation and suppliers who are left with a global choice to trade with, will soon find less powerful buyers whom they can trust. Thus, acquiring and using power effectively and positively is necessary for success in organizations, for maintaining trading partner relationships.

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