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# Trust as a Governance Mechanism in Internet-based Interorganizational Cooperative Relationships

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#### Abstract

In a world of increasing complexity and situational variety, business-to-business collaboration based on real time information pooling is thought to be central for optimization of the value creation process. The qualities of the Internet render possible a simultaneous exchange of information among an unlimited number of firms, causing both academics and practitioners to assert that inter-firm alliances based on the Internet will become increasingly important in economic life. This paper reports on an explorative study that focuses on the use of Internet technology in interorganizational cooperative relationships, and the consequences this may have for the use of trust as a governance mechanism. The findings indicate that trust-based governance to a large extent is dependent on the specific actors that are involved in the relationship, and the particular industry in which the companies operate. Further, while interorganizational trust was very important in the initial stages of Internet business, mainly because of a need for flexibility that allowed for adapting to unforeseen situations, our findings indicate that we now experience an evolution towards more formal control mechanisms as companies are getting more acquainted with the Internet as a medium for conducting inter-firm business transactions.

#### 1. Introduction

Fierce competition in most industries is forcing organizations to search for new ways to improve product quality, customer service and operating efficiency to remain competitive. Organizations operate in dynamic and turbulent environments that require flexibility and fast responses to changing conditions (Ahuja & Carley, 1998). Internet has accelerated the need to deliver products and services faster and to provide information instantly both to internal units and external business contacts. Consequently, the ability to adapt to new needs and demands from different groups of customers, suppliers, intermediaries and competitors, is of vital importance. Demanding customers are followed by a need for more flexible value chains, where each part can be changed or eliminated quickly and effectively. Optimization of the total value creation process is thus very difficult to maintain by a single firm. Consequently, the core competencies of organizations are likely to be limited to specific parts of the total value creation process; the complexity of organizational tasks caused by technological acceleration and rapid globalization of markets has made it increasingly difficult for firms to be competitive without combining forces with other organizations (Ariño & Torre, 1998).

Advanced information and communication technology make interorganizational communication and collaboration possible with lower costs and greater flexibility than ever before. This may stimulate noteworthy changes in models of organizational behavior, and lay the foundation for the evolution of new organizational structures that challenges traditional thoughts regarding management and administration (Staples et al., 1998; Bryan & Fraser, 1999). That is, fast and cost effective opportunities for communication and exchange of data and information may cause companies to outsource activities they used to perform internally. In this way, products and services will to a larger extent be composed of a range of sub-products from specialized companies, which again necessitate an increase in focus on interorganizational coordination. As an example, the Internetbased global provider of personal financial services, E\*TRADE Group Inc., states that they by September 30 were engaged in business relations with 3,778 unique cooperating partners. Further, the company claims that they handle all of these relationships on an individual basis: «None of our associates are subject to collective bargaining agreements or represented by a union» (E\*TRADE, SEC 2000, pp. 33). This research seeks to enhance the understanding of potential impacts the Internet as a medium for coordination and communication may have on the governance of business relationships. More specifically, the objective is to examine the role of trust as a governance mechanism in Internet-based business relationships.

Price, authority and trust are often regarded as the three major governance mechanisms used in organizing inter-firm transactions (see e.g. Bradach & Eccles, 1989). Transactions are rarely governed *solely* by price, authority or trust, that is, elements of these mechanisms are generally used in different combinations

(Haugland & Reve, 1994) to govern interorganizational cooperative relationships [figure 1].

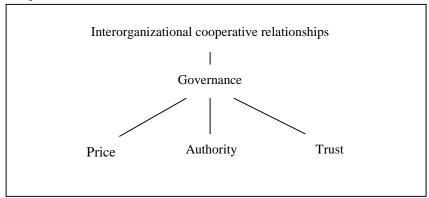


Figure 1: Main Governance Mechanisms

The reason for choosing trust as the governance mechanism in focus is twofold. First, in order to cope with new challenges in the global business environment, firms have begun to implement organizational innovations both internally and in their relations with other firms. Both the steep increase in the number and variety of exchange relations, and the increased complexity and uncertainty of the business environment are hard to handle without the presence of interorganizational trust. Second, more knowledge-intensive products and services, and more information-based modes of production, necessitating more sharing of sensitive information, make trust a highly desirable property in new business environments (Sydow, 1998).

The paper is structured as follows: In chapter 2, theoretical model, we describe the concept of interorganizational relationships, trust-based governance, inter-firm consequences of electronic communication, and outline a future governance situation in electronically mediated business relations. The methodological approach is described in chapter 3. Chapter 4, analysis and discussion, contains an interpretation of the collected data in terms of various forms or components of social governance. Finally, in chapter 5, the results are summarized, and some limitations of the study are mentioned along with suggestions for future research.

#### 2. Theoretical Model

### 2.1 Interorganizational Cooperative Relationships

An interorganizational relationship occurs when two or more organizations transact resources [e.g. money, products or services] among each other (Van de Ven, 1976), and act in concert to pursue mutual gain (Combs & Ketchen, 1999). There are many different types of cooperation structures and alliances, yet no uniform understanding of how these forms are divided into typologies (Larsen, 1999). Jägers et al. (1998) use the concept of "network organizations" as a generic term that includes all arrangements involving cooperation between people or organizations. In order to differentiate between various types of cooperative arrangements, they use the concepts "control" and "uncertainty" to array the alternatives on a continuum of network organizations [figure 2].

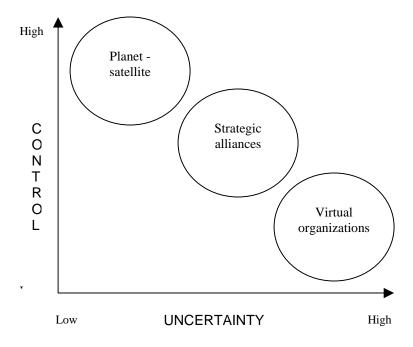


Figure 2: Continuum of Network Organizations<sup>1</sup> (Jägers et al., 1998)

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<sup>&</sup>lt;sup>1</sup> In this paper, the figure's relevance is related to its axes (uncertainty and control), and not to the three different organizational types. That is, this paper applies a wide understanding of interorganizational cooperative arrangements and relationships, and the names of the different organizational forms described by Jägers et al. are not of any importance. However, they are included in order to illustrate and describe the effects that various positions along these two axes may have on organizational characteristics.

According to Jägers et al., *Planet-Satellite organizations* are characterized by a high level of control because of clear and extensive contracts, and differences in the power structure. Generally, there are clear contracts in *strategic alliances* as well, but the relationship between the participants is to a larger extent based on principles of equality and reciprocity. *Virtual organizations* are almost solely marked by mutual dependence; the objective can only be reached by exploitation of each participant's special knowledge and methods.

#### 2.2 Governance of Inter-firm Relations

Administration and management of networked organizational arrangements are mainly a matter of coordinating joint activities and establishing guidelines for interaction, and have been analyzed from different theoretical perspectives. *Transaction cost economics* (Williamson, 1985) focuses on market incentives and hierarchical mechanisms as alternative means of structuring buyer-seller relationships. The theory maintains the presumption that organizational variety arises primarily in the service of transaction cost economizing. It distinguishes between economic activities that should be accomplished by internal control and governance, activities that should be organized by market mechanisms, and activities that are best executed through different collaborative arrangements.

In contrast to transaction cost theory's suggestion that relational or intermediate forms of governance are maintained by *economic* weapons to keep opportunistic behavior at bay (Zaheer & Venkatraman, 1995), *relational contract theory* emphasizes the importance of building personal trust relations, and thus addresses the behavioral or social dimensions of a relationship (Macaulay, 1963; Macneil, 1980). This may be especially important in uncertain and complex situations that require flexibility from the participants. It is costly and difficult to make all potential conditions explicit in situations with these characteristics, and informal or social governance mechanisms, like trust, can therefore be effective.

#### 2.3 Social and Normative Governance: Trust

Trust can be regarded as a generic term describing different social norms used as governance mechanisms in interorganizational relationships. In this sense, trust is a property of collective units that is used to describe the relations among groups of people rather than individual psychological states (Haugland & Reve, 1994). It can be defined as a set of expectations shared by the parties involved in an exchange process (Zucker, 1986), which alleviates the fear that one's exchange partner will act opportunistically (Bradach & Eccles, 1989; Mahoney et al., 1994). Trust is the main governance mechanism in social contract theory (Zaheer & Venkatraman, 1995), and is regarded as more appropriate in environments characterized by uncertainty and complexity, flat hierarchies and increasing specialization. With

detailed formal contracts, it is difficult and costly to make modifications (Nooteboom et al, 1997), hence trust can make interorganizational relations function more effectively by reducing complexity, and by fostering coordination and cooperation in ways that more formal contracts cannot (Zucker, 1986; Hill, 1990; Ring & Van de Ven, 1992; Hardy et al., 1998).

In an interorganizational context, Sako (1998) distinguishes between three types of trust:

- Contractual trust refers to a belief in a partner's willingness to carry out its contractual agreements.
- Competence trust is related to the perception that a partner possesses the capabilities of doing what it is intending to do, and requires a shared understanding of professional conduct and technical and managerial standards.
- Goodwill trust refers to the assumption that the partner will make an openended commitment to take initiatives for mutual benefit while refraining from unfair advantage taking.

In this study, contractual trust, competence trust, and goodwill trust, including different social norms and shared values, are all included in the measurement of the trust concept. Hence, trust refers to aspects like the business' preferences regarding details of, and reliance on written business contracts [contractual trust], the appreciation and perceived value of advice from business partners and confidence in the partners' job qualifications [competence trust], and the reliance of partners to be helpful although such efforts are not required by the existing agreements [goodwill trust]. Further, trust relates to the degree to which the business relationship is perceived to be valuable and worth maintaining for both economic and social reasons [contractual solidarity], and the extent to which the parties in a relationship believe that the relationships will work as a foundation for future conflict solving in stead of neutral third parties or lawsuits [relational conflict solving].

# 2.4 Internet-based Inter-firm Cooperation: Implications for Information Exchange

New applications, new users, and faster connections have spurred the Internet to become an important medium for business-to-business communication. According to Evans & Wurster (2000), the rapid growth of the Internet is the catalyst of comprehensive industry structure alterations. Traditionally, business strategy has focused on either "rich" information; customized products and services tailored to a niche audience, or it has reached out to a larger market, but with watered-down information that sacrificed richness in favor of a broad, general appeal. Now, this fundamental tradeoff between richness and reach is diminishing. In this way, the

Internet changes the nature of competition as well as firms' strategic and competitive advantages, and is likely to alter the environment in which enterprises operate as it both simplifies and creates new possibilities for interorganizational communication.

On the basis of organizations' constant increase in the need for flexibility and rapid adjustment of products and services (Ahuja & Carley, 1998), many authors argue that increasing use of the Internet in business-to-business communication have engendered new forms of organizations, such as "networks", "virtual organizations", and "value added partnerships". With reference to Jägers et al. (1998) [figure 2], the consequence may be that the cooperative alliances of the future will be characterized by low control and high uncertainty.

### 2.5 Uncertainty

New and complex projects are likely to be characterized by absence of relevant information at the time contracts are settled; thus business deals cannot be fully specified or controlled by the parties in advance of their execution (Ring & Van de Ven, 1994). Further, cooperative environments characterized by complex tasks and comprehensive demands, makes it both complicated and expensive to develop rules and guidelines of how to handle different situations. Consequently, the involved enterprises encounter uncertainty regarding future states. According to Jägers et al. (1998), uncertainty and lack of control are mainly caused by absence of information, which implies that situations involving relatively unfamiliar and high-risk tasks require flexible networks where pooling of knowledge and information is done on a regular basis. As personal and informal bonds between the participants simplify sharing of both explicit and implicit knowledge, personal relations based on trust may be of fundamental importance in establishing and managing business relationships in uncertain environments.

#### 2.6 Control

Jägers et al. (1998) assert that the level of control in a network organization is determined by the characteristics and extent of the contracts that exist. However, as the concept *control* is often associated with managers' abilities to achieve desired working behavior from employees (Yates, 1989), contracts and formal guidelines for cooperation are alternative means to *achieve* control in or between organizations. In contrast, the *normative control* literature focuses on the roles of a common organizational culture, values, and trust as effective substitutes for less bureaucratic control (Gargiulo, 1999).

On this basis, the anticipated evolution of interorganizational cooperative relationships regarding the control and uncertainty dimensions presented in the

previous discussion, are illustrated in figure 3. This model, which is based on figure 2, shows a continuum of network organizations where different organizational forms can be placed along the dimensions of control and uncertainty. In our model, control ranging from high to low is replaced by a continuum ranging from formal to normative control.

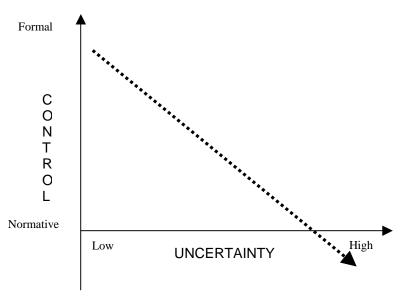


Figure 3: Anticipated Effects of Increasing Use of the Internet

As already pointed out, cooperative relationships in the digital economy are characterized by uncertainty as to future conditions, necessitating flexibility and informal relations between the participants. Hence, it can be argued that increasing levels of information exchange between the participating organizations in an interorganizational cooperative relationship, will be accompanied by increasing emphasis on social or normative governance mechanisms in the relationship [as illustrated in figure 3]. This leads to the following assumption: Increasing use of the Internet as a channel for information exchange in an interorganizational relationship, should lead to higher levels/increasing use of social governance mechanisms [indicated by the hierarchically arranged forms of trust – contractual trust, competence trust, and goodwill trust - and the degree of contractual solidarity and relational conflict solving] in this relationship. The goal of the research is to investigate whether this assumption holds.

# 3. Methodology

### 3.1 Research Approach

Because little is known about the connection between extensive Internet use and governance of inter-firm relations, an explorative research approach was chosen. This explorative goal of the research, together with the specific focus on inter-firm relationships, dictated the use of key informant interviews [global approach] over more quantitative and extensive approaches to inquiry. As a composite measure would have required a vast amount of respondents in order to demonstrate that the measure in fact is attributable to processes on an organizational level, a global approach was chosen. The data collection strategy was to collect as much background information as possible through desk-based research in order to allow the informant interviews to concentrate on collecting in-depth information on the practices and experiences of the chosen research objects. Data concerning the research question were obtained through interviews with the top managers in the organizations, and the interviews were conducted by telephone in a semi-structured format based on a pre-developed interview guide. All interviews were taped. The interviews were designed to yield information related to various aspects of interfirm relations, and the informants were allowed to read the interview guide in advance of the interview. Edited transcripts<sup>2</sup> of the taped interviews were prepared, and served as the database for the study. In addition, minor parts of the information used in the discussion were found on the companies' websites.

## 3.2 Empirical Setting

Because of the type of information needed, that is, in-depth and detailed information relevant to a relatively wide problem area, interviews with only a small number of informants could be carried out. Further, the informants had to be acquainted with the Internet as a medium for communication on both organizational and industry levels, and it was therefore important to single out technology-intensive companies operating in industries that are highly visible in the digital economy. On the basis of these factors, two Internet-based companies from the Norwegian travel industry [GoToGate AS and Reisefeber AS<sup>3</sup>], and two online companies operating in the Norwegian financial services industry [E\*TRADE Norge ASA and Stocknet-Aston Securities ASA<sup>4</sup>] were chosen as the empirical setting for the study.

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<sup>&</sup>lt;sup>2</sup> Most of the transcripts are verbatim. However, the parts where the informants' wordings were incomplete are edited.

<sup>&</sup>lt;sup>3</sup> www.GoToGate.no and www.Reisefeber.no

<sup>4</sup> www.ETRADE.no and www.Stocknet.no

### 4. Analysis and Discussion

### 4.1 Internet Technology and Information Exchange

The information gathered from the business cases indicate that collaboration with multiple players outside the firm based on real time information pooling is a central aspect of digital economy business. As an example, the CEO of E\*TRADE asserts that they have several thousand distinct cooperative relationships<sup>5</sup>. Of course, the level of technological integration in these relationships depends on the motives underlying the relationships. Even though Internet technology potentially simplifies activities like marketing and advertising, the importance of the technology is mainly related to the effectuation of stock trading in the financial services industry [for stockbrokers] and travel bookings in the traveling industry. Thus, all four companies seek to optimize their main business operations, and one of the primary means for the enterprises to achieve this operational efficiency is through technological integration of their business processes. Technological integration helps the companies eliminate process inefficiencies, which is clearly reflected in the objectives and the certificates of warranty that the online stockbrokers in this study give to their customers. These announcements are published on the websites of E\*TRADE and Stocknet respectively [translated from Norwegian]:

"E\*TRADE is the only online brokerage company in Norway where you can place your share-purchases directly into the trading systems of the Oslo Stock Exchange. This means that there aren't any manual intermediaries between your share purchase/placements and the stock exchange. This is particularly important when the stock exchange is running; an intermediary can result in a long delay in the purchasing process."

"Stocknet guarantees that all orders received through our Internet system will be forwarded to Oslo Stock Exchange within 60 seconds from the order is received. Normally, your purchasing order reaches the stock exchange within 5 seconds. If we don't meet this deadline, Stocknet doesn't charge any brokerage commissions for this particular order."

Like E\*TRADE and Stocknet, both online travel agencies [Reisefeber and GoToGate] base their day-to-day business on the Internet. They receive orders from their customers via their websites, and handle these orders by transmitting them to the various suppliers' online booking services.

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<sup>&</sup>lt;sup>5</sup> See page 2, paragraph 2.

# 4.2 Uncertainty and Control in Electronic Mediated Cooperation

Some important business activities of the actors in the travel and financial services industries are to a large extent governed by clearly defined rules and regulations. As an example, all travel agencies have to be registered as an IATA-bureau<sup>6</sup> in order to book airline tickets. The booking process is also regulated by unalterable rules regarding time of departure and name of the traveler. There are specific time-periods for making changes to the reservations, and acceptable travel guarantees are needed in order to complete the bookings. The use of control mechanisms in the relationships between travel agencies and airlines is therefore independent of the agencies' use of the Internet in their business processes. The relationships between suppliers of travel products [especially airline tickets] are therefore mainly governed by formal control mechanisms, and the level of uncertainty is relatively low.

Similar rules and regulations can be found in the financial services industry. That is, the stockbrokers have to accept the standardized agreements offered by the Oslo Stock Exchange, The Norwegian Central Securities Depository, and the Bank of Norway. The stockbrokers are fully dependent on these agreements in order to accomplish their business processes. Thus, formal control mechanisms and low levels of uncertainty characterize these relationships.

Generally, cooperative agreements that involve exchange of goods and/or money are relatively standardized in both industries involved in this study. This is especially true regarding the companies' relations with content suppliers, illustrated by the following statements<sup>7</sup>.

"In the travel industry, the agreements are standardized [regarding length and content]. Often, we have one-year agreements, and if their duration is longer than one year, it is usually possible to renegotiate and change the content of the agreements."

[CEO – GoToGate]

"Agreements that exist in the financial services industry are regulated, i.e. clear and detailed contracts. With strategically important content suppliers, we generally have long-lasting contracts."

[CEO – E\*TRADE Norge]

<sup>7</sup> All statements by the informants used in this paper are translated from Norwegian.

<sup>&</sup>lt;sup>6</sup> IATA – International Air Transport Association.

"Oslo Stock Exchange, The Norwegian Central Securities Depository, The Banking, Insurance and Securities Commission of Norway, and Norway's clearing house are not very flexible. They have to manage a lot of customers, and we are one of many actors that have to behave according to standard procedures."

[CEO – Stocknet]

"The agreements are not flexible. Our suppliers are not flexible because they have relations with a great many travel agencies and other actors in the traveling industry. Thus, the contracts have to be standardized."

[CEO – Reisefeber]

The most common agreements in the travel industry are one-year, contract-based framework agreements. All written agreements that GoToGate are involved in are based on a pre-developed framework. All agreements are evaluated continuously, and it is simple to make changes. That is, the framework that underlies most agreements proposes some intentions for the cooperation, and it is possible to make adjustments within this framework at any time. The cooperative activities are often settled for short time periods [4-6 months], which is the case for all supplier agreements that GoToGate has. In addition to these supplier relations, the company has agreements that are not characterized by standardized procedures. Some relationships are less fixed and involve mutual exchange of information. These agreements do not contain any economic commitments or conditions for any of the parties. Generally, GoToGate offers information and services that the partners need, which again may generate customers to their website. Because these relations do not involve any exchange of money or goods, the contracts are more informal.

In addition to the agreements with suppliers of financial products and services [e.g. Oslo Stock Exchange, The Norwegian Central Securities Depository, etc.], Stocknet perceives their relations to suppliers of information technology [Aston Technology] and their Internet Services Provider [NetPower] to be critical for their existence. However, in contrast to the formal and strictly regulated relations with the first mentioned supplier group, the relations with Aston Technology and NetPower are more or less based on informal control procedures.

"The relationship with Aston Technology is critical. It is important to us that they do their job, and we are very satisfied with the company. This business relationship is more like a partnership. [...] They do anything to please us."

"Regarding our relationships with Aston Technology and NetPower, we never bring out the contract to appreciate the text. We always do what is most appropriate and serviceable for both parties, and these agreements are therefore very flexible with regard to practical execution. We do not live up to the agreements point by point."

[CEO – Stocknet]

The CEO of Reisefeber claims that the flexibility and duration of agreements differ with regard to company type. A body of rules and regulations dictate the administration of relations with major suppliers [e.g. airlines]. In contrast, Reisefeber has initiated cooperate relationships with other companies, which are governed by other means than the airline relationships are. Generally, these companies offer products and services that are not fundamental to Reisefeber, but may be valuable as complementary services to the customers, or the relationships may attract customers to Reisefeber's website.

"We have a verbal agreement with Bilguiden. [...] This agreement is based on a desire to help each other, we are not competitors in any ways, and we swap commercial ads as long as there is free advertising space on our websites. [...] This agreement is very flexible; both companies are allowed to sell the advertising space to other companies without considering contract-based regulations."

[CEO – Reisefeber]

Further, the CEO of Reisefeber asserts that there are differences in flexibility between agreements that the involved parties have experience with, and agreements that are new and involve aspects that the parties are unacquainted with. In novel situations, it is common to practice some flexibility, as the companies have to get to know each other and the new market opportunities that may emerge. Reisefeber also experiences that their relations with online actors are more flexible and less specific compared to their relationships with "traditional" companies.

# 4.3 Governance Implications: The Role of Trust in Electronic Environments

#### 4.4 Contractual Trust

A general opinion held by the informants is that governance of cooperative arrangements involving exchange of money and products/services has to be based on clearly defined contracts, and such relations are therefore more often regulated by detailed contracts than are other types of business relationships. Only one of the four informants in this study reported that they have experienced problems with a partner regarding fulfillment of the existing contract. This indicates that contractual trust is a common aspect of the cooperative relationships. Further, it is common to make long-term contracts with strategically important suppliers. This implies that the companies trust the partners to carry out the written agreements, which again indicates that contractual trust is an important aspect of relations with strategic partners.

According to the CEO of Reisefeber, there are major differences between their relationships with online companies and their relations with "traditional" companies regarding emphasis on the contractual document. Traditional companies are generally more skeptical to initiating a cooperative relationship with an Internet-based company.

"[...] traditional companies are generally more skeptical. This has changed a bit lately, but they still regard it as important to provide for one's own economic safety by use of clear contracts in case we go bankrupt."

[CEO – Reisefeber]

## 4.5 Competence Trust

Competence trust refers to a company's perception of whether a partner is capable of performing the activities that it is responsible for according to the cooperative agreement. All informants claim that it is important to be well informed about the potential partners before entering into agreements. This is particularly true for companies that do not have a strong brand name. The reason for this is that companies without a brand name of their own often are associated with well-known partners, and branding is therefore often a central motive for online companies to initiate cooperative relationships. The primary condition underlying such a relationship is a belief that the partner's products and services are of good quality. In other words, this type of branding presupposes competence trust.

"Usually our suppliers have much stronger brand names then we do, which means that we often get associated with them. Thus, if a supplier doesn't deliver high-quality products, and doesn't take care of the customers, this will have bad influence on the customers' perception of us."

[CEO – Reisefeber]

According to the CEO of Reisefeber, they often make demands regarding use of technology in business relationships. However, the most typical situation is that Reisefeber organizes and develops the technological solutions, and then receives database information from the cooperating parties. Typically, Reisefeber operates and administers the entire technological applications. Sako (1998) asserts that one mechanism for creating informal commitment, is for the customer to provide technical assistance to a supplier. To the extent that the customer demonstrates knowledge and skills by providing technical assistance, it enhances suppliers' competence trust of the customer. Thus, arrangements where Reisefeber is in charge of all technological issues are likely to include some degree of competence trust.

In addition, transfer of database information per ce indicates trust in the relationship. Sharing of information facilitates cooperation of organizations, and it

is argued that provision of information by either of the parties has a significant effect of enhancing trust and reducing opportunism (Sako, 1998). In other words, the types of information exchange in which Reisefeber is involved, are to some extent based on normative control mechanisms.

#### 4.6 Goodwill Trust

Goodwill trust is defined as the assumption that the partner will make an openended commitment to take initiatives for mutual benefits while refraining from unfair advantage taking. With this specific type of trust in mind, the informants were asked whether they relied on their partners to always be helpful even though they were not required to by the existing contractual agreements. Our travel industry informants would expect the majority of their partners to be supportive and helpful in unexpected and problematic situations.

"Our experience shows that we always find solutions to problems that aren't specified in the agreements. [...]. This is what cooperation is all about."

[CEO – GoToGate]

"Generally, our business partners are absolutely helpful although they don't have to according to the contract. [...] We see most of our partners as relatively flexible in this area, and believe that they always want to make the best out of unpredicted situations and problems, regardless of the contract terms."

[CEO – Reisefeber]

One informant emphasized that it is of crucial importance that all parties perceive the cooperative relationships to be valuable. Further, as all agreements are based on a framework, the benefits and advantages for both parties are always dependent on interpretation of the contractual agreements. Most of the agreements that GoToGate are involved in have to be specified during the contract period, and this specification process is based on an expectation of mutual benefits. It is therefore safe to assume that some extent of goodwill trust has to be present for these framework agreements to work properly.

The CEO of Reisefeber claims that most of their partners are flexible regarding the contract texts and generally wish to make the best out of problematic situations. However, there are major differences between partners regarding their willingness to be helpful in situations beyond the contractual agreements. Generally, online companies with whom Reisefeber cooperates, have more knowledge of the company and are thus more familiar with the problems and challenges that Reisefeber is faced with. Moreover, online companies have a common goal of

establishing a well-functioning Internet market. Online companies are therefore more helpful than traditional companies, and Reisefeber perceives the level of goodwill trust between companies that base their existence on the Internet to be larger than relationships involving traditional companies.

Generally speaking, the informants from the financial services industry were more reserved regarding extraordinary or additional services from their business partners.

"E\*TRADE doesn't expect the partners to be helpful. However, if we have a good relation to a partner, this partner may be willing to be more flexible than if the relationship was poor."

[CEO – E\*TRADE Norge]

"NetPower is always helpful in problematic and unexpected situations even though they don't have to according to the existing agreements. Similarly, Aston Technology works 24 hours a day for us if it is necessary. [...] I believe that DnB would have been accommodating if we needed them to, but when it comes to the rest of our partners, I would say no."

[CEO – Stocknet]

These observations indicate that the total level of goodwill trust is larger in the travel industry than in the financial services industry. However, the CEO of E\*TRADE asserts that they have a few cooperative agreements in which the relationships are more important than the contracts. As an example, their relation with The Norwegian Shareholders Organization is based on a written contract, but the relationship is mainly governed by a common or mutual understanding. They agree upon goals but the means are settled as the collaboration proceeds. Because the cooperative activities are determined on the basis of the relationship, the CEO of E\*TRADE holds that they are willing to make adjustments in order to preserve the relation, thus not focusing solely on economic benefits.

# 4.7 Contractual Solidarity

Contractual solidarity refers to the desire of both parties to preserve the relation for both economic and social reasons. Statements from the informants indicate that this particular aspect of interorganizational trust is important in many business relationships. This is especially true for the travel industry companies. The CEO of GoToGate asserts that personal relations are very important to make the agreements work properly. Thus, qualities of the social relations are important aspects when companies are to decide whether they want to get involved in a technologically integrated cooperation with another company or not.

Generally, business relationships in the financial services industry focus mainly on the economic elements. However, the CEO of E\*TRADE argues that it is important

to preserve established personal relations. Therefore, they do not use personal relations as a basis for negotiations, as this may jeopardize the existing relations. This is especially true for the negotiation of the economic elements of the agreements. Instead, personal relations function as a basis for the selection of business partners. Thus, social relations are important for E\*TRADE's selection of partners but not for the negotiation process.

The CEO of Stocknet argues that their business relations with suppliers of information systems and the Internet Services Provider (ISP) can be characterized more like partnerships than customer-supplier relations. The relationships are characterized by mutuality, flexibility, and helpfulness, which is more or less fundamental for the business affairs between the companies. It is therefore safe to assume that these relations are worth maintaining for both economic and social reasons.

#### 4.8 Relational Conflict Solving

Relational conflict solving implies that the relationship between the cooperative companies is used as a basis for conflict solving, and the informants were asked whether they preferred to use the social relationships or the existing contracts as reference points for solving disputes. Three of the four informants claim that conflicts rarely occur. When a conflict situation once in a while occurs, all informants argue that they prefer to use the relationship as the basis for conflict solving instead of the judicial systems and/or neutral third parties.

"Conflicts seldom arise. [...] The formal parts of the contracts are hardly ever used to solve conflicts."

[CEO – GoToGate]

"Conflicts hardly arise. However, in conflict situations, we try to use informal means to settle the dispute."

[CEO – Stocknet]

These statements clearly indicate that conflict solving is handled through mutual understanding and personal relationships rather than through authority based structures. However, all informants state that Internet business has undergone some radical changes between April 2000 and April 2001. That is, cooperative agreements are now to a larger extent created through the use of legal assistance. As a result, the contracts are generally more detailed and specific regarding each party's duties and tasks in the cooperative relationships, and there is less room for interpretation of the agreements. Further, conflict solving may also be easier as the contracts to a certain extent provide a basis for the conflict solving processes.

# 4.9 Recapitulation: Main Findings

The preceding discussion can be synthesized in a couple of general or conclusive findings. First, the use of trust as a governance mechanism is largely dependent on the specific organizations that are involved in the relation. That is, flexibility, duration, and specification of content in the agreements vary with the specific companies that are involved in the relationships. Relations with companies that are easy to replace are generally more flexible than relations with actors that possess a fundamental position in the industry. Examples of these key actors are the Oslo Stock Exchange, The Norwegian Central Securities Depository, and The Banking, Insurance and Securities Commission of Norway in the financial services industry, and airlines in the travel industry. Detailed contracts and legal regulations of business activities reduce the uncertainty in the inter-firm relationships, which indicates that these relationships' location in our model is unchanged [figure 4].

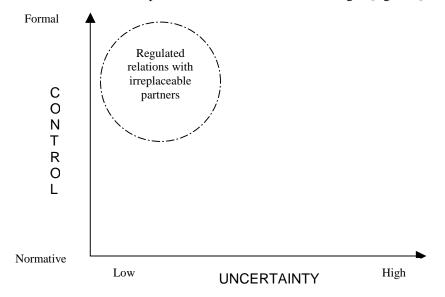


Figure 4: Uncertainty and Control in E-Mediated Cooperative Relationships Involving Irreplaceable Partners

Second, there tends to be an overall evolution towards more formal control mechanisms and lower levels of uncertainty in business relations based on the Internet as a medium for communication and coordination. In contrast to business relations where large and irreplaceable partners are involved, relationships between companies that base their existence on information technology and the Internet can be placed closer to the normative end of the control axis. However, the Internet world has undergone major changes during the last year. Today, cooperative agreements are generally much more tangible and regulated by formal mechanisms than was the case before.

"[...] the way it worked 12 months ago is far from the methods and principles that are necessary for succeeding in the business life over long time periods. I believe that it is important to bring this knowledge into the future, but that we also work in more conventional ways. It is not either old economy or new economy but rather a change in the speed of traditional processes. I think that it is starting to reach a more realistic level, and that there are minor differences in cooperative agreements in the old versus the new economy. 12 months ago, there was a difference in that the agreements were less strict than they are now, and that they weren't based on clearly defined strategies. Now people are becoming more levelheaded and think through the pros and cons of the cooperative relationships."

[CEO – GoToGate]

" [...] one year ago, the agreements in the Internet world were extremely loose, particularly in Norway. Now the agreements have become more standardized, and they are to a larger extent founded on legal aspects. Thus, I think that cooperative relationships are more solid now than they were before. [...] some agreements can be flexible, especially in new and unknown situations."

[CEO – Reisefeber]

The statements listed above indicate that important aspects of Internet-based interorganizational cooperative relationships have undergone major changes since early 2000. Previously, cooperative relationships were characterized by vaguely defined contracts, informal relations, experimental activities, and the relations were to a large extent governed by informal control mechanisms. This situation has changed. Today, most businesses have become more experienced with the new communication environment, and they have acquired the skills and knowledge necessary for designing well-functioning agreements in the Internet world. As a consequence, today's business relations are mainly governed by clearly defined contracts, and the involved parties generally know what the content of the agreements implies for their business. Thus, these results indicate that we have experienced an evolution of cooperative relationships in the digital economy as shown in figure 5.

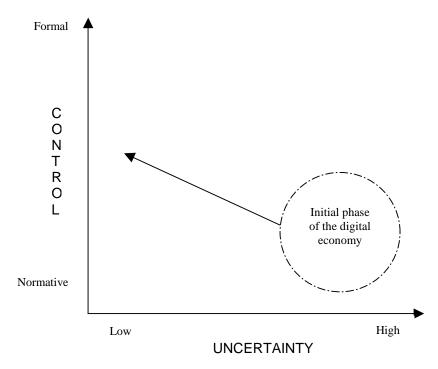


Figure 5: Evolution of Cooperative Relationships in Electronic Environments

Generally speaking, uncertainty is reduced because business deals are more specific than before and activities are regulated by more formal rules and guidelines. However, it is important to notice that there are major differences between the various relationships that a company is involved in. Formal control mechanisms and a low level of uncertainty characterize relations involving companies that deliver unique products and services, as well as companies that are subject to strict regulations. In contrast, companies that do not deliver unique products and services have to emphasize relationship building in addition to product and service optimization in order to preserve a business relationship. The results also indicate that the level of goodwill trust is generally higher in relationships between online companies. In contrast, traditional companies are more reluctant to initiating business relationships with Internet-based companies and prefer to use clear and sound contracts.

Our findings may indicate that flexibility is called for in the initial stages of unknown projects. The transformation to Internet business models implies major changes for many companies and, therefore, it is necessary to allow for continuous adjustments and adaptations. However, as companies get acquainted with the Internet, the need for flexibility is reduced, and other aspects of the business relationships become more important.

#### 5. Conclusions

Our research shows that management of inter-firm relations is intrinsically embedded in the particular industry standards and organizational culture of the participating firms. In addition, some findings can be drawn from the study. First, replacing partners in electronic environments is generally easy. Therefore, establishing and maintaining trust-based inter-firm relationships are more important for those companies that do not deliver unique products and services than for the companies that possess a monopoly position or are irreplaceable. Second, the results indicate that the digital economy has been in a phase of adjustments and learning. Uncertain and novel situations necessitate a need for continuous adaptation, which again require flexible business relations characterized by trust-based governance. However, as companies get acquainted with the Internet, they prefer to use more formal and cost-related mechanisms in a less uncertain environment.

The theoretical and practical (managerial) contribution of the research can be summarized as follows: The data suggest that the use of particular governance mechanisms is partly dependent on the characteristics of the specific products and services that are exchanged in a business relationship. Therefore, it becomes important to consider the type of resources involved in an exchange process to explain the choice of mechanisms to govern the relations. Thus, the results underscore the need to augment research on social governance mechanisms with a rationale from theories that involve a focus on the resources exchanged in business-to-business relationships.

The limitations of this study include: First, the research reported draws on a very small purposive sample of online companies. Thus, questions of generalizability remain. Second, we used only one informant from each company to report on their dyadic business relationships. As the perceptions of relationship characteristics apparently are highly subjective, the quality of the study would probably have benefited from using several informants. Further, it is important to make clear that any interpretation of the qualitative data is subjective, and that the reliability and validity of the findings should therefore be questioned.

There are several ways this research could have been pursued further. First, applying an evolutionary perspective seems to be crucial. As the results indicated that major changes have occurred during the last year, a wider time frame of research in this particular problem area may allow for identification of some of the important developmental aspects of the situation. Second, by including both online companies and traditional companies from different sectors, it would have been possible to make comparisons with respect to governance mechanisms in use.

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