

Institutional Trust and Familiarity in Online Interorganizational Relationships

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Abstract

Institutional trust is necessary for inter-organizational relationships in e-commerce. Two types of institutional trust are herein proposed (a) third-party institution-based trust, which deals with intermediary-driven structures, and (b) bilateral institutionalized trust, which deals with dyadic inter-organizational processes. We examine how these two types of institutional trust develop through their underlying dimensions (i) structural assurances, (ii) facilitating conditions, and (iii) situational normality. We focus on how interorganizational trust and online relationship building can be longitudinally facilitated by institutional trust, which can initially substitute and progressively complement the role of familiarity. More specifically, this study focuses on the time-dependent nature of initial trust formation, and specifically on the role of relationship phase (from exploration to maturity), by describing (a) the role of bilateral relative to third-party institutional trust on interorganizational trust, and (b) the transition of the underlying dimensions of institutional trust. This research has implications for (1) the longitudinal nature and role of institutional trust in online relationship building, (2) the literature on initial trust formation, and (3) the strategic design and use of cost-effective trust-building mechanisms.

1. Introduction

In today's online environment, interorganizational relationships are notably characterized by the extensive use of information technology and the impersonal nature of the transaction context. Making the online environment unique is that the traditional mode of building trust through familiarity (Gefen 2000; Gefen et al. 2003; Gulati 1995; Luhmann 1979) may not be as readily available, especially at early stages of relationship building. The e-business context resembles the environment where institutional trust would be particularly important by necessitating the certification of business partners, as it was in the early days of the great immigration to America at the turn of the 19th century (Zucker 1986). This paper focuses on the longitudinal institutional trust formation in online buyer-seller relationships. Two institutional trust mechanisms are examined: (a) third-party institution-based structures commonly available by third-party intermediaries, such as B2B marketplaces, and (b) bilateral institutionalized practices driven by dyadic interorganizational processes. Since an increasing number of firms initiate and sustain online relationships with new partners, the proposed focus is on the longitudinal trust formation that starts with a long-term prospect, not one-time transactions. In doing so, the study highlights the transitional role of institutional trust, arguing for a time-dependent analysis of the types and dimensions of institutional trust.

Traditional business relationships heavily rely on legal bonds in their early relationship building phases as a way of controlling uncertainty. But this may not work as well in the online environment because of the still unclear legal environment of the Internet. For example, many international trade documents do not specify if the electronic version has the same status as the paper version across countries. Due to this uncertainty, many companies are rightfully reluctant to initiate online relationships, forfeiting the potential benefits of doing business online. To reduce the uncertainty of the online environment many third-party intermediaries, such as B2B marketplaces, have been introduced to help organizations transact within a controlled networked environment through specific structures, guarantees, and safety nets (Shapiro 1987), especially because of the cultural differences these entail (Evers 2001).

This study proposes a theoretical model of how the relative effects of specific institutional trust antecedents shift as relationships mature. The antecedent role of institutional trust is explained through (a) third-party institution-based provisions, and (b) bilateral institutionalized provisions, *beyond* third-party assurances. The study suggests ways that could help the strategic design of institutional provisions by online B2B marketplaces, highlighting how initial trust formation changes as the relationship matures. From a normative standpoint, it aims to predict when institutional third-party structures should be used to build trust, and when companies should rely on bilateral provisions, cautioning for either over-reliance on third parties during the maturity stage of the relationship or on bilateral mechanisms during initial trust formation.

The proposed theoretical model addresses the following research questions: (1) How online inter-organizational relationships can be built and nurtured based on third-party institution-based and bilateral institutionalized practices? (2) What is the role of institutional trust on interorganizational trust and relationship continuity? (3) What is the nature and the antecedents of the types (third-party and bilateral) and dimensions (structural assurances, facilitating conditions, and situational normality) of institutional trust? and (4) How does the relationship life cycle phase influence the relative antecedent role of (i) bilateral versus third-party institutional trust on buyer-supplier trust, and (ii) the

three underlying dimensions on institutional trust? A set of propositions is presented.

2. Conceptual Development

The proposed research model and propositions are shown in Figure 1. The phase of the relationship is a critical moderator on the relative antecedent role of the two types of institutional trust and their three dimensions.

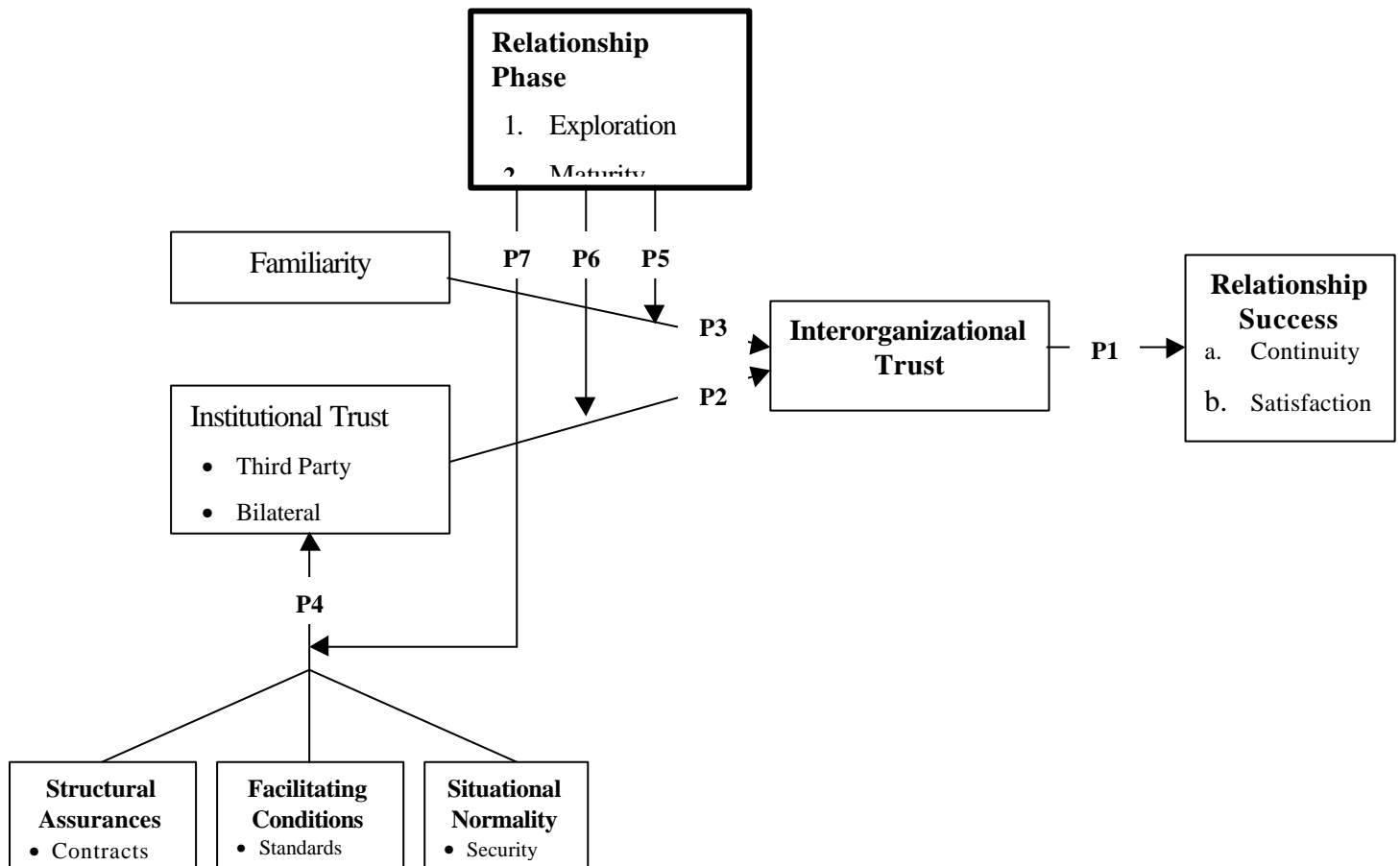


Figure 1. Conceptual Model and Research Hypotheses

2.1 Online Relationship Building

A long-term relationship is a benefit in many interfirm interactions (Dwyer et al. 1987; Dyer 2000; Ring and Van de Ven 1992). The difficulties in building such relational exchanges start as early as the initiation phase. This study focuses on a specific case of online relationship building, namely *initial interorganizational trust formation*, where two companies unfamiliar with each other decide to transact online with each other. The promise of B2B e-commerce largely depends on such online relationships. The managerial relevance of online relationship building is how to cost-effectively build trust to promote *relationship continuity* with promising trading partners.

2.2 Interorganizational Trust

Interorganizational trust is an organization's (trustor's) belief that another organization (trustee) in an exchange relationship will behave in accordance with the trustor's confident expectations (Kumar 1996). Interfirm trust has been related to desirable outcomes, such as firm performance, conflict and opportunism reduction (Zaheer et al. 1998), competitive advantage (Barney and Hansen 1994), and other favorable economic outcomes (Doney and Cannon 1997). While there are probably several factors that are critical to relationship success, following Morgan and Hunt (1994), we theorize the presence of interorganizational trust as a *key mediating variable* in relationship building, continuity, and success.

Relationship continuity is defined as the perception of an organization's expectation of future transactions with another organization. There is significant evidence in the literature to suggest a strong association between trust and continuity. Morgan and Hunt (1994) show that trust leads to a willingness to continue an interorganizational relationship. According to Ganesan (1994), trust is a necessary ingredient for long-term orientation by shifting the focus to future conditions. Similarly, Anderson and Weitz (1989) show that interorganizational trust is key to maintaining continuity and satisfaction in buyer-supplier relations. According to Geyskens et al. (1998), satisfaction is a critical trust outcome. Since the above do not limit themselves to specific scenarios, it is proposed that they will apply in online relationship success, conceptualized in terms of continuity and satisfaction¹.

P1a: Interorganizational trust positively influences online relationship continuity.

P1b: Interorganizational trust positively influences online relationship satisfaction.

The positive effect of interorganizational trust on relationship success has been theorized and empirically validated in multiple contexts; hence, it is expected to be particularly influential in *online* B2B relationship building where the level of uncertainty is generally higher. The practical implication of P1 is that relationship continuity is an integral factor for managers that endeavor to build and sustain online interorganizational relationships; hence, recognizing the role of interorganizational trust as a critical antecedent calls for further research on external antecedent variables that build trust over time. Following McKnight and Chervany (2002), this study proposes that institutional factors (trust in the situation), in addition to familiarity, are critical antecedents of interorganizational trust.

2.3 Institutional Trust

Zucker (1986) suggested that institutional trust is the most important trust creating mode in impersonal economic environments where the sense of a common community with common values is lacking. Such a community currently exists on the Internet because of varying cultural understanding and values (Evers 2001). Zucker describes two dimensions of institutional trust: third-party certification and escrows that guaranty expected outcomes. Shapiro (1987) describes institutional trust as the belief that a trustor has about the security of a situation because of guaranties, safety nets, and other performance structures.

¹ These propositions are not new. Their goal is to indicate whether trust, and other abstract concepts have an impact on some more concrete and more managerially relevant constructs, such as relationship continuity and satisfaction.

The institutional view of trust has been widely adopted by e-commerce researchers, perhaps because e-commerce brings together organizations with no familiarity and similarity. McKnight and Chervany (2002) describe institution-based trust as a critical part of Internet transactions. In particular, they distinguish two types of institution-based trust that they argue are relevant for initial trust situations, namely (1) *situational normality*, which they define as the belief that success is likely because the situation is normal and (2) *structural assurance*, which they define as the belief that success is likely because there are promises, contracts, regulations or guarantees in place. This observation has been supported also by other research, including Pavlou and Gefen (2002) on consumer auction marketplaces and by Gefen et al. (2003) in the context of e-commerce. Tan and Thoen (2001) propose the term control trust to describe trust built by institutionalized procedures. Pavlou (2002) examines the role of several institutional structures in building credibility and benevolence in sellers within B2B marketplaces. Applying these arguments to an online B2B context, we expect that institutional trust should positively influence an organization's trusting beliefs (interorganizational trust). In fact, industry reports strongly support these propositions (Evers 2001).

2.3.1 Third-party Institution-based Trust

Online B2B marketplaces have received considerable attention in e-business (Bakos 1998; Palmer et al. 2000; Sarkar et al. 1995). Forrester Research (www.forrester.com) predicts that transactions through B2B marketplaces will reach \$2.7 trillion by 2004 (Blackmon 2000). Online B2B marketplaces are virtual third-party organizational forms (Pavlou and El Sawy 2002), which provide infrastructure technologies to enable online buyer-seller relationships (Hempel and Kwong 2001). The proposed third-party trust-building institutional provisions draw upon Zucker's (1986) trust building mechanisms (escrows and certification). McKnight and Chervany (2002) argue that third-party institution-based trust helps engender trust in e-commerce. Pavlou (2002) shows how specific third-party institutional structures build trust in industrial sellers. Following the arguments of Palmer et al. (2000) and Sarkar et al. (1995), we propose a positive relationship between third-party institution-based trust and interorganizational trust.

P2a: Third party institution-based trust positively influences interorganizational trust.

2.3.2 Bilateral Institutionalized Trust

Institutional trust deals with third parties. But buyers and sellers can establish their own institutionalized processes to manage their interactions. Following Dyer (2000), bilateral institutionalized trust is defined as 'the subjective belief or confidence that there are fair, stable, and predictable shared routines, processes, and norms to guarantee successful transactions'. As Dyer describes, Japanese automakes do not rely on specific people that happen to be there, but on bilateral institutionalized practices that entail future contracts and current processes of interaction. The standards of conduct are expected transaction patterns, or the ground rules that set the context for successful buyer-seller relationships (Dwyer et al. 1987). Even when specific people leave the organization, institutionalized provisions (not interpersonal relations) secure relationship continuity.

This type of institutional trust builds on shared structures, processes, and routines to create stable transaction contexts. Accordingly, we have the following proposition.

P2b: Bilateral institutionalized trust positively influences interorganizational trust.

2.4 Familiarity

An important issue that affects B2B institutional trust is *familiarity*. Familiarity deals with knowing and understanding the trading partner, its work procedures, goals, beliefs and values, and generally who it is and what it stands for. Familiarity builds trust by creating appropriate frameworks within which the trustor can place its beliefs about the trustee and know what to expect from it (Gefen 2000; Luhmann 1979). Since trust is generally built when the trusted party behaves as expected (Blau 1964), these frameworks create the necessary conditions for trust creation. Trust can thus be built by showing that the trusted company indeed behaved as it was expected to. Moreover, by knowing the partner, companies can know their partner's capabilities, and hence have reasonable expectations (Kumar 1996). A second method in which familiarity builds trust is that familiarity results in less communicational misunderstandings (Kumar 1996) that would otherwise ruin trust, even unintentionally. Familiarity is related to Zucker's (1986) process-based trust, trust that is built through ongoing successful interactions.

P3: Familiarity positively influences interorganizational trust.

2.5 Dimensions of Institutional Trust

McKnight et al. (1998) described two dimensions of institutional trust – situational normality and structural assurances. The typical normality example in e-business is that communication infrastructure is secure in the sense that authorization, integrity, non-repudiation, and confidentiality are guaranteed (Costello 2001); structural assurances are legal contracts. We posit a third dimension of institutional trust – *facilitating conditions*, which are less formal than structural assurances, but more tangible than mere situational normality. Facilitating conditions are shared standards, relationship values, and common beliefs about behaviors and goals (Heide and John 1990; Jap and Ganesan 1999; Morgan and Hunt 1994). Facilitating conditions are the underlying non-governance mechanisms that support transaction success, such as standards that support (a) the use of interoperable IT platforms, (b) business message standards like EDI, or (c) common processes for uniform product descriptions. Industry reports show a growing recognition of the need to establish such standards (Meehan 2001). Industry reports suggest that it is difficult for companies to arrange EDI standards by themselves. This study proposes that institutional trust comprises of three basic dimensions – structural assurances, facilitating conditions, and situational normality.

P4a: There is a positive relationship between institutional trust and structural assurances.

P4b: There is a positive relationship between institutional trust and facilitating conditions.

P4c: There is a positive relationship between institutional trust and situational normality.

3. Relationship and Familiarity

Relationship phases are major transitions in how organizations regard each other (Dwyer et al. 1987). Following Jap and Ganesan (1999), we propose two major phases - exploration and maturity. This distinction aims to differentiate between the initial phase of the relationship with no familiarity, as opposed to the stage where there are many shared experiences. Based on past research (Gefen 2000; Gulati 1995; Luhmann 1979), we expect interorganizational trust to increase when the relationship moves from the exploration to the maturity stage.

3.1 Institutional Trust Versus Familiarity

As the business relationship matures, the effect of familiarity should increase and that of institutional trust decrease. Familiarity only works when there is a basis of knowledge about the other company. Initially, when little is known of the trading partner, familiarity will deal, per force, with a general familiarity with the industry and marketplace. As the partnership evolves and more knowledge of the specific partner is gained, familiarity will have a stronger impact on trust. As the trusting company gets more familiar with its partner, its ability to create a better framework within which to build its trust and its ability to communicate better both increase.

Also, as the companies get to know each other better and understand each other through increased familiarity, their need to rely on third party guaranties declines. As Zucker (1986) pointed out, the main task of these third party guarantors is to create the appropriate conditions when there is a low level of familiarity. Nonetheless, institutional trust is still necessary even in mature relationships. In spite of decreasing importance, contracts are still necessary in the maturity phase as also are standards that reduce misunderstandings.

P5: The positive effect of institutional trust on interorganizational trust attenuates as the relationship moves from the exploration to the maturity phase, while the positive effect of familiarity on interorganizational trust intensifies.

3.2 Third-party Institution-based Trust Versus Bilateral Institutionalized Trust

In the exploratory phase, we expect third-party intermediaries to influence interorganizational trust more effectively than bilateral institutionalized trust. In later phases, when organizations become more familiar with each other in a specific relationship, we expect that the bilateral institutionalized provisions become more influential than third-party provisions. Our argument is twofold. First, third-party trust always costs extra money. Third-parties charge fees for their services. Secondly, if anything, explicitly relying on such third party guarantees eventually reduces trust in the long-term by introducing suspicion in the relationship (Sako and Helper 1998). This is consistent with Bensaou and Anderson (1999) who argue that ongoing relationships that provide general purpose provisions relieve the need for added third-party transaction supports. Hence, bilateral institutionalized trust is the method of choice in successful mature interorganizational relationships, but in the exploratory phase, this bilateral trust building is often too complicated for companies to undertake themselves.

More specifically, in terms of bilateral legal contracting, companies are typically unable to judge whether they have included all essential terms in the contract to protect their interests, and may lack confidence in the legal validity of electronic contracts. Hence, third-party structural assurances are much simpler than bilateral institutional trust in the exploratory relationship phase, if only because the situation does not yet exist for the latter to take effect.

In terms of facilitating conditions, initial assessment of IT competence is much more difficult for bilateral institutional trust than for a dedicated third-party that usually has in-house IT expertise to do such an assessment. In terms of situational normality, outsourcing authentication to dedicated third-party certificate issuer (e.g. Verisign) is a preferred alternative at the early relationship phases since the legal validity of electronic trade messages is difficult to assess in initial online relationships. And so, trusted third parties provide effective means to build interorganizational trust at early relationship phases.

Familiarity is crucial for the shift from third-party to bilateral institutional trust. Parties that know each other already for some time in a specific business relationship are better able to negotiate contracts, set up bilaterally common standards for business processes, product descriptions, and establish IT interoperability and connectivity, commonly observed in EDI adoption patterns. Therefore, in the maturity phase, the two trading partners can themselves play a more important role than external third parties in building interfirm trust. In sum, the effect of third-party institution-based trust on interorganizational trust and relationship continuity (indirectly) will attenuate as the relationship matures, whereas the impact of bilateral institutionalized trust will gradually increase over time (Figure 2).

P6: The positive effect of third-party institution-based trust on interorganizational trust diminishes as the relationship moves from the exploration to the maturity phase, while the positive effect of bilateral institutionalized trust on interorganizational trust intensifies.

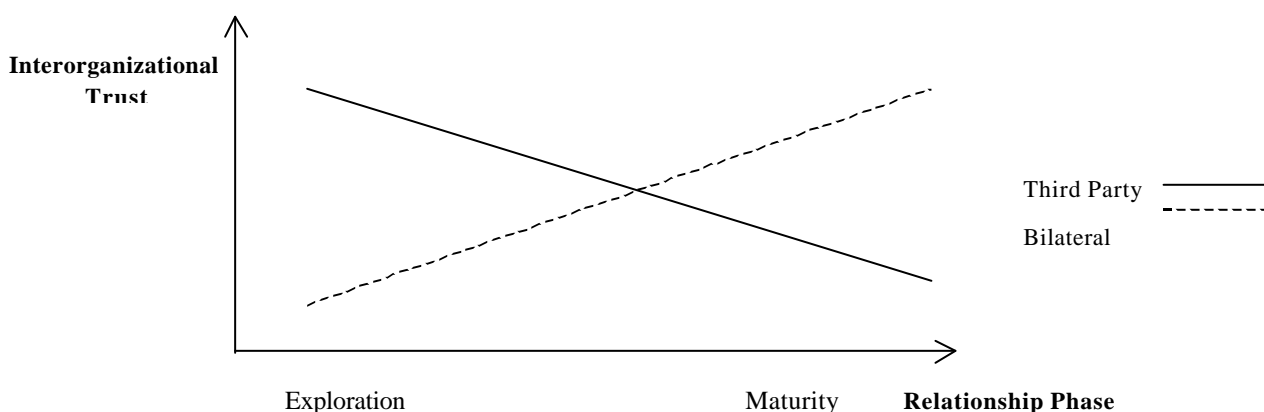


Figure 2. Third Party Vs Bilateral Institutional Trust on Interorganizational Trust over time

Although the growing familiarity is crucial for the shift from third-party to bilateral institutional trust, it is not the case that institutional trust is entirely replaced by familiarity in the maturity phase. Even for

familiar companies that have established long relationships, there is always a need for institutional provisions, such as structural assurances (in case anything goes wrong). However, in the maturity phase, custom-tailored contracts are commonly achieved as opposed to generic ones provided by third-parties. More important, as P5b suggests, facilitating conditions, such as common standards for business processes, product descriptions, IT interoperability and connectivity are crucial for relationship success (Meehan 2001). These conditions are not determined by familiarity because they do not automatically develop over time within a relationship, but they only exist as a result of deliberate action.

3.3 Familiarity and Institutional Trust Dimensions

Although growing familiarity does not replace institutional trust, it does have an effect on the impact of its dimensions. The generic effects of structural assurances, facilitating conditions, and situational normality on institutional trust change over time (Figure 3). In general, structural assurances will be the most prominent factor in initial trust formation since parties have no other basis for trust and calculative (rational) means are the only trust-building means. However, with the growing familiarity between organizations in mature relationships, structural assurances gradually become less important. In the maturity phase, there is little reason to rely primarily on governance structures, and most anomalies can be treated. Similarly, situational normality, such as Internet security, has to be high in the exploration phase of the relationship since any abnormality is detrimental on trust; however, organizations in an established relationship are less concerned about slight abnormalities. As the relationship builds up, facilitating conditions that were relatively negligible in the exploratory phase, gradually become the most important basis for trust. Facilitating conditions attract less attention in the exploratory phase, because there is simply less commercial activity. Usually, first commercial activities in a starting business relation are tentative, and both sides are willing to improvise with respect to IT compatibility. In many cases, special stand-alone applications, needed to support the transaction, are used temporarily to bypass any lack of IT interoperability or connectivity. However, the more activities take place in a relationship between companies, IT standards become the most important. In sum, in the initial stages of online relationship building, structural assurances will be more important than facilitating conditions, but in later phases, relationship standards, norms, and values will gradually overshadow contracts as the primary means to build institutional trust.

P7: The positive effect of structural assurances and situational normality on institutional trust will attenuate as the relationship moves from the exploration to the maturity phase, while the positive effect of facilitating conditions on both types of institutional trust will intensify.

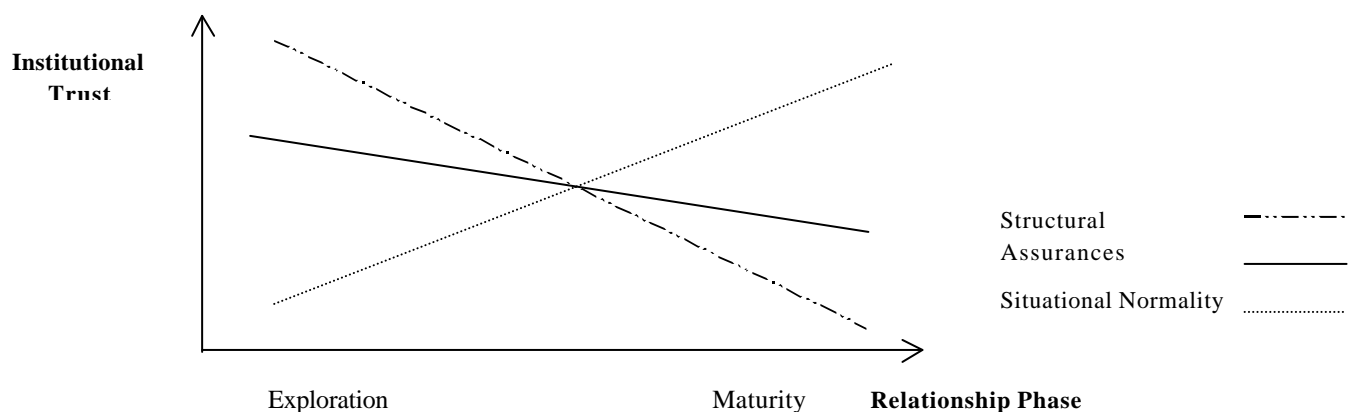


Figure 3. *The Effect of Dimensions of Institutional Trust on Interorganizational Trust over time*

4. Research Methodology

To provide empirical support for the proposed research model and propositions, we will survey companies that are in the process of initiating and building online relationships. Respondents will be asked to assess the degree to which the proposed variables exist in a focal online relationship which their organization has recently established. To test the longitudinal nature and role of the two types and three basic dimensions of institutional trust, companies will be asked to report the current stage of their focal relationship (Jap and Ganesan 1999), which is expected to vary from exploratory to mature stage. In addition, to ensure that all institutional provisions (third-party and bilateral) are present, the sample will consist of companies participating in online B2B marketplaces (e.g. Covisint, Bolero, and others), which have established third-party institutional provisions for companies to rely upon.

Rather than directly operationalizing the underlying dimensions of institutional trust (bilateral and third-party), proxies will be used for specific representative factors commonly utilized in practice (Figure 1). The representative institutional factors will be chosen based on theoretical rationale and practical evidence from exploratory interviews with practicing managers.

5. Discussion

This study aims to provide several new insights on the role of institutional trust in building and nurturing online interorganizational relationships. First, this study proposes and describes the nature and role of two fundamental types of institutional trust (third-party institution-based and bilateral institutionalized trust) in the initial formation of interorganizational trust. Given the increasing importance of institutional trust in B2B e-commerce, it is important to shed light on its nature and underlying dimensions. Second, this study extends previous research (McKnight et al. 1998; Zucker 1986) by proposing a comprehensive set of specific institutional dimensions that constitute the two types of institutional trust (third-party and bilateral). In particular, this study explicitly proposes the concept of *facilitating conditions* to describe an institutional trust dimension that is related to standards for IT interoperability and connectivity between organizations, both in a bilateral or a third-party driven context. Finally, this study describes the time-dependent nature of institutional trust, which is proposed as a key moderator of trust building.

We argue that the character of institutional trust in a relationship changes due to the growing familiarity between the relation partners. First, we propose that growing familiarity in a relationship makes a relationship less dependent on institutional trust, as one would expect since initial trust has been associated with initial trust formation. In addition, we propose that familiarity has two distinct affects on institutional trust: (1) it causes the shift from a dominance of third-party institutional trust in the initial exploratory phase to a dominance of bilateral institutional trust in the maturity phase, and

(2) familiarity changes the relative weight of the dimensions of institutional trust. It is however important to observe that familiarity only influences the nature of institutional trust, it does not make it obsolete in a maturing relationship.

Finally, this paper extends the theory on how B2B marketplaces can be strategically used beyond mere cost reduction and bargaining power (Bailey and Bakos 1997) or auction and catalog hosting (Raisch 2001). Online B2B marketplaces are proposed as virtual network of organizations that depend on third-party institution-based trust to initiate online relationship building, especially at the early stages of the relationship life cycle. Hence, B2B marketplaces are prescribed as the method of choice to initiate online relationships, while stressing the need to gradually build bilateral institutionalized trust to avoid infinitely relying on intermediaries.

5.1 Suggestions for Future Research

This study aims to entice future research to validate the proposed theoretical model by empirically showing how the two types of institutional trust and their underlying three dimensions could engender interorganizational trust and encourage relationship continuity over time. It would be interesting to empirically assess the relative effect of the various antecedents of online relationship building that could help prescribe a safer and more cost-effective combination of building and sustaining online interorganizational relationships. Second, we also aim to encourage future research to theoretically derive and empirically test specific institutional structures (e.g. feedback systems, IT competence, contract monitoring, marketplace standards) that B2B marketplaces offer.

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