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Interaction technology: Speech act based information technology support for building collaborative relationships and trust

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Abstract

While relationships and trust are now commonly accepted as central to conducting business both within and across organizations, literature provides only minimal guidance as to how relationships and trust in inter and intra-organizations are created. Moreover, the role that information technology could play in building trust has largely been ignored.

This paper describes an Internet-based process for building trust between collaborative commerce partners. Integrating concepts from Winograd and Flores' concept of speech act theory based "conversations for action" with research on "closed loop cycles" of trust and relationships in the disciplines of management and marketing, the paper first develops a framework for understanding trust and trust-building processes. The framework characterizes the process of building of trust as the management of commitments inherent in speech acts between requesters (customers) and performers. Furthermore, joint sense making during the conversation for action contributes to greater transparency thereby also increasing the levels of mutual trust.

The process framework is used to develop requirements for information technology support for a process and tool for building trust. The paper then goes on to describe an implementation of the conversations for action and the closed loop cycles through a web-based software tool based upon Winograd and Flores' work. Experiences with managing commitments and closing the loop are presented through a case study in an organization that develops and maintains menu-driven voice applications for the call center industry. The case study shows the inadequacy of traditional communication technologies in managing complex, geographically distributed collaborative commitments, and shows how the use of the software tool contributes to a greater level of satisfaction and closing of the performance loop. The paper ends with a reflection on the nature of the tool, its possible uses and misuses, and the role of human wisdom in its use.

Keywords: Speech act theory; Conversations for action; Building relationships and trust; Interaction technology

1. Introduction

"Fresh flowers are blooming on the battle-scarred landscape where once-bitter rivalries among suppliers,

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customers and competitors once took place." (Daft [9], p. 179)

While collaboration is the sine qua non of any organized human endeavor, it has only recently been recognized as an important idea underlying business. After decades of building upon an adversarial, Porterian[2] view of strategy and inter-organizational relationships, business and academic press is now embracing the religion of trust and relationships [31]. Trust is being trusted again.

Implicit in the Porterian view of inter-organizational relationships is a view of the transacting partners as opportunistic, and consequently strategy as a means for controlling the potential opportunism of the trading partners. This view of the other party as an adversarial opportunist derives from and underlies economic theories such as transaction cost economics [42], agency theory [4], and resource dependency theory [30]. In transaction cost theory and agency theory, transaction costs and agency costs are costs deemed to be incurred for protecting against and controlling the potential opportunistic behavior of the other party in the business transaction or, in case of an agency relationship, of the firm's agents. In resource dependency theory, the focus of strategy is on minimizing dependency on others while maximizing others' dependency on us. Hence, the approach to managing transaction costs is either to supervise closely the other party or agent, or alternately, use contracts, incentives, punishments, or technology to monitor and ensure their compliance with the contract. The former ultimately culminates into the total incorporation of the other party or the agent into the organizational hierarchy thereby achieving full control over them; in the case of the latter, instruments of control are designed and implemented to align the agent's behavior with the firm's interests. In either case, the key strategic thrust is one of controlling the other party's potential opportunism:

"We agree that control is an overarching issue for business organizations. According to Yates [44], most technologies and organizational forms have had as their main objective the creation of more advanced control instruments—instruments that enable us to enhance and extend our control over processes in society and nature. Correspondingly, most of the management literature continues to provide models and tools to enhance and support control over business processes—production, distribution, marketing, sales, and so on." (Ciborra [6], p. 3)

In information systems, the Porterian view of the inter-organizational relationships manifests itself as the much-heralded strategic role of IT for competitive advantage, and the characterization of IS as a competitive weapon, as presented, for example, in the work of Applegate, Mc Farlan, and Mc Kenny [1]. Likewise, the logical outcome of the transaction cost perspective in information systems is the proposition that information and communication technologies are strategic mechanisms for controlling transaction risks and transaction costs of necessary, but inherently risky, intra- and inter-organizational interdependencies and relationships [7,27].

However, we are beginning to realize that it is not always possible to impose complete control over our organizations or our business partners [6]. This is especially the case in those situations where the power between the two parties is evenly matched. Even in the case of unequal power, it is not always possible to observe, monitor, and control the variety of ways in which a subordinate in a hierarchy or a trading partner in a business relationship can stray from the desired behavior. The notion of incomplete contracting and consequent need for relational contracts suggests that not all possible contingencies in

[2] Michael Porter's seminal "five forces model" has been the staple opening for many strategy courses in graduate and undergraduate business programs. With his prescription of gaining power over suppliers, locking in customers, and creating barriers to new entrants, Porter creates a paranoid view of the business relationships and business environment. The underlying assumption is that everyone, our suppliers, our customers, and for sure our competitors are out to get us, and we better get them before they get us. However, there are internal contradictions in Porter's prescription. This paranoid view of strategy is at odds with his idea of an extended value chain and a value system across multiple organizations. A value chain requires cooperation and collaboration between different units within the organization, a value system between different organizations in the supply chain. Porter, like many other strategists, takes a control view of the environment. Strategy depends on the ability to control what is external to the organization, that is, its suppliers, customers, competitors and new entrants, and new substitute products.