

Using the Web for Contract Negotiations

Ben Martz

Northern Kentucky University, USA

Susan Gardner

California State University, USA

INTRODUCTION

Negotiation skills play a critical role for today's knowledge workers. Therefore, the need for university students to develop negotiation and problem-solving skills grows more important each year. Concurrently, the need for students to understand and work with computers continues to grow. This paper presents the exploratory results of using a prototype computer negotiation system developed around a set of real world data. The paper reviews previous research perspectives of negotiation, traditional (face to face) and information system perspectives (electronic). The social information processing theory posits that these characteristics differ between these two groups and that over time the characteristics exhibited by electronic group members should match those exhibited by the traditional group members. The results found differences in the characteristics of satisfaction, trust and tolerance, but did not find a convergence of perceptions between the two groups. The paper concludes by addressing critical success factors for future research in this area.

BACKGROUND

Traditional Perspective: The Face-to-Face Environment

Negotiation is a decision-making process by which "two or more individuals make joint decisions on how to allocate scarce resources" (Thompson, 1998). The competition for scarce resources exists when people perceive each other as wanting the same scarce resources (Thompson & Gonzalez, 1997). The traditional form of labor negotiation is one whereby parties who compete for these scarce resources conduct negotiations face-to-face.

The traditional negotiation process involves both verbal and nonverbal exchanges of information (Thompson, 1998). Kanawattanachai and Yoo (2002) divide the concept of trust in a negotiation into two main attributes: cognition-based trust (CBT) and affect-based trust (ABT). Their results show that the CBT side of trust dominates the ABT in high performing teams. Another critical characteristic is emotion because emotion enables the parties to understand each other (Thompson, 1998). DePaulo (1992) stresses that interpersonal relationships are more successful when people are "sensitive to the emotional, nonverbal cues at the table." According to Ekman (1984), these emotional exchanges include a complex set of facial, vocal and postural cues. Emotion influences the likelihood that negotiators will be able to resolve conflicts with existing resources, pursue cooperative strategies, and consider alternatives made by each other. In so doing, traditional negotiation enables its negotiators to judge accurately one another's interests.

The management of emotions depends upon the negotiator's ability to detect accurately the emotions of others. Ekman (1984) maintains that emotionally skilled negotiators can "detect lies or deceptions in their counterparts." While the least trustworthy sources of lie detection are words and facial expressions, the most reliable sources are body movements. According to Frank (1988), negotiators can judge accurately whether others will cooperate or compete within 30 minutes of interaction. And, when negotiators share similar attitudes and beliefs, when they are physically close to each other during negotiations, they prefer to divide scarce resources equitably.

The way negotiators perceive these interdependent negotiation situations have an important effect on how they will negotiate (Bazerman & Neale, 1992). Lewis and Weigart (1985) point out that trust is a multi dimensional construct with complex interdependencies. Lewicki, Saunders, and Martin (1997) note that although there can be no guarantees that trust leads

to collaboration, evidence does suggest that mistrust inhibits collaboration. If negotiators do not trust each other, they act defensively. In so doing, they search for hidden meaning in messages rather than accept information at face value. If parties trust, they most likely communicate their needs accurately. What negotiators say and more importantly, how they say it, affect the conduct of negotiations.

Thus, traditional, face-to-face negotiations provide an environment wherein negotiators can read verbal and nonverbal cues, detect emotions, engage in active listening, and behave in a trusting manner. A negotiation carried out within an electronic environment inherently does not provide access to the nonverbal cues envisioned as vitally important. The purpose of this research is to compare two negotiation environments: the face to face and the electronic.

Information Systems Perspective: The Electronic Environment

The activity of negotiation has a long history, characterized both as an art (Raiffa, 1982) and as a science (Kersten, 1986). Many different models have been developed to attempt to explain and to categorize negotiation. In their work on group support systems, Benbasat and Lim (1993) provide a summary of these models that include game theory, economic, political, and social-psychological. However, whether appearing in a business, economic, or political setting, negotiation strives to have parties come to terms over an issue.

From an information systems perspective, a negotiation system is a subset of the general area of decision support systems. When more than one person, a group, is involved on both sides of the activity, the literature around group decision support systems (GDSSs) becomes relevant. In their work on GDSSs, DeSantis and Gallupe (1985) use a two by two matrix along the two axes of Duration of Decision-Making (limited to ongoing) and Dispersion of Group Members (close proximity to dispersed) created four environments. For this study, the duration remains the same while the dispersion differs.

Jelassi and Foroughi (1989, p. 169) used the DeSantis and Gallupe model to include “behavioral characteristics and cognitive perspectives of negotiators” in their study of negotiation support systems (NSS). They extended the model by proposing, “communication

needs [of a NSS] vary with each bargaining situation.” They summarized their exploratory work with a call for a framework that considers both technical and behavioral aspects in NSS designs. This study attempts to answer that call.

Other CMC research is less clear on the success of computer-mediated meetings when compared to face-to-face meetings. Computer-mediated communication meetings have created process losses such as overhead costs (Dennis & Valacich, 1993), stronger identification of non-consensus (Benbasat & Lim 1993), information blocking (Diehl & Stroebe, 1991); information overload (Doyle & Strauss, 1982); and channel conflict (Miranda & Bostrom, 1994). In an effort to reconcile these findings, Walther (1992, p.53) proposes that the CMC channel simply takes “a great deal longer than face-to-face interactions to accomplish more than simple data transfer (does).” Walther believes that the key to understanding these contrary findings is the over-reliance on “one shot, equal time investigations” that offer “no comparison parallel face-to-face interactions.” This study does a direct comparison.

Furthermore, Walther (1992) details a social information processing theory to incorporate his ideas and present his propositions. Two fundamental assumptions underpin this theory: (1) the information one receives via nonverbal and verbal-textual channels over the course of interactions with another individual creates the impression of that other individual and (2) in computer-mediated communication, messages take longer to process than do those sent face-to-face. Walther proposes that with all things being equal, the differences between face to face and CMC channels will disappear over time. This current study focuses on this proposal.

Hypothesis: Over time, differences in interpersonal and relational development characteristics between members of computer-supported and face-to-face negotiating groups will disappear.

METHODOLOGY

The authors developed a simple Web-based negotiation system as part of a senior-level, management class in labor negotiation. The prototype system included a proposal-making function where teams could present proposals to their counterparts and also included

5 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/using-web-contract-negotiations/12499

Related Content

Tools and Applications for Reasoning Communities

(2012). *Approaches for Community Decision Making and Collective Reasoning: Knowledge Technology Support* (pp. 210-259).

www.irma-international.org/chapter/tools-applications-reasoning-communities/67328

Mutation Testing and Its Analysis on Web Applications for Defect Prevention and Performance Improvement

Suguna Mallika S. and Rajya Lakshmi D. (2021). *International Journal of e-Collaboration* (pp. 71-88).

www.irma-international.org/article/mutation-testing-and-its-analysis-on-web-applications-for-defect-prevention-and-performance-improvement/265270

Business Process Design Meets Business Practices Through Enterprise Patterns: A Case Study

Carmelo Ardito, Ugo Barchetti, Antonio Capodieci, Annalisa Guido and Luca Mainetti (2014). *International Journal of e-Collaboration* (pp. 57-73).

www.irma-international.org/article/business-process-design-meets-business-practices-through-enterprise-patterns/105475

Information Technology and Diversification: How Their Relationship Affects Firm Performance

Namchul Shin (2011). *E-Collaboration Technologies and Organizational Performance: Current and Future Trends* (pp. 65-79).

www.irma-international.org/chapter/information-technology-diversification/52341

Business Process Design Meets Business Practices Through Enterprise Patterns: A Case Study

Carmelo Ardito, Ugo Barchetti, Antonio Capodieci, Annalisa Guido and Luca Mainetti (2014). *International Journal of e-Collaboration* (pp. 57-73).

www.irma-international.org/article/business-process-design-meets-business-practices-through-enterprise-patterns/105475