

# Chapter XV

## A Study in the East Asian Context on Computer Support of Pre-Negotiation and Negotiation Stages

**John Lim**

*National University of Singapore, Singapore*

**Yin Ping Yang**

*National University of Singapore, Singapore*

### ABSTRACT

*Two seemingly disparate phenomena, advancement in computing technologies and rise in complexity of business negotiations owing to globalization, have fostered and made appealing computer-supported negotiations. Whereas past studies of Negotiation Support Systems (NSS) have examined the potential benefits of supporting negotiations, computer support for pre-negotiation activities has been largely ignored in so far as empirical work is concerned. This chapter addresses this gap by categorizing negotiation activities into the pre-negotiation phase and the negotiation phase, and reports on an experimental study of the impact of NSS on the different phases of negotiation. Results show that both pre-negotiation and negotiation support improved gains in outcome with increased time in reaching agreement. Further, pre-negotiation support led to more equal outcomes for negotiating dyads. The findings show the usefulness of NSS in enhancing the quality of differing stages of negotiation. Notably, this chapter recognizes the important role of culture in the negotiation setting, and discusses its pertinence with respect to the context of the current study. The corresponding implications and conclusions are highlighted.*

### INTRODUCTION

Negotiations occur widely at the individual, organizational, and international levels, as well

as in a wide variety of political, economic, and social settings. They offer a constructive alternative to other means of resolving conflicts, such as violence or avoidance (Anson & Jelassi, 1990).

However, negotiations are often not as simple and rational as they could be. In fact, negotiations are complex, ill-structured, and evolving tasks which require sophisticated decision support (Bui, 1992). Moreover, human negotiators may be susceptible to “stumbling blocks”, which are certain cognitive biases and social emotional aspects of the negotiation process that prevent negotiators from achieving high joint outcomes (Foroughi & Jelassi, 1990). Examples of the stumbling blocks include the cognitive difficulty of determining optimal solutions, negative framing of the negotiation, ineffective communication, and so on.

These stumbling blocks to successful negotiations, coupled with the increasing complexity of the issues to be resolved, have led to the concept of Negotiation Support Systems (NSS), a special class of Group Support Systems (GSS). NSS are designed to assist negotiating parties in reaching mutually satisfactory decisions by supporting information analysis and communication protocols. Research into this area has borne encouraging reviews (Rangaswamy & Starke, 2000) of how NSS can positively bring about higher joint outcomes and satisfaction for the negotiating parties.

However, most NSS research thus far has dwelt on the impact of NSS on negotiation per se; none has broached on the effect of NSS support on the various stages of negotiation. Specifically, the important stage of pre-negotiation has been largely ignored. In many endeavors, planning is the key element in success. One challenge faced by business negotiations (e.g., buyer-seller, labor-management, international business merger) is to jointly identify and set ranges on critical issues to be negotiated prior to the actual negotiation. The preparatory phase is lengthier for international transactions than for domestic ones due to the difficulty in gathering all necessary preliminary information (Cellich & Jain, 2004). In the existing NSS literature, tasks employed in many laboratory studies (e.g., Jones, 1998; Foroughi et al., 1995; Delaney et al., 1997; Goh et al., 2000; Lim & Yang, 2004) are largely structured in the

sense that issues and utilities scores are pre-assigned to negotiating parties with little pre-negotiation preparation; as such, research findings could be rather limited vis-à-vis the complex nature of real-world negotiations. Furthermore, like most business and management literature, NSS empirical research tends to be dominated by a North American perspective, while actual practice continually adapts to new circumstances and varies in different cultural contexts. Our research is a single-cultural study based on an East Asian context, with its primary interest being in investigating the impact of NSS support on the pre-negotiation stage as well as the negotiation stage. Specifically, the chapter seeks to answer the following research question: *How does NSS support for different stages of negotiation (pre-negotiation and negotiation) improve/impact upon negotiation outcomes reflected as gains, equality and time to reach agreement?*

The chapter is organized as follows. The next section reviews the relevant literature, followed by propositions on the impact of NSS support for pre-negotiation and negotiation over key outcome variables. The research method and the results of statistical analysis are then presented. We discuss these results through a lens of the embedded Asian culture in which this study is conducted. Limitations of the findings as well as future research opportunities are addressed. The last section concludes the chapter.

## **LITERATURE REVIEW**

### **Related Work on Group Support Systems (GSS)**

In some sense, NSS can be considered a subset of group support systems (GSS), which can be used to support virtual teams (Huang, Wei, & Lim, 2003). Some work done in GSS could therefore be useful in informing NSS research. During the last decade, there has been an increasing interest

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