Chapter 27
A DSS User is a Happy Negotiator:
The Impact of Decision Support on Emotional Behaviors in Text-Based Online Negotiations

Patrick Hippmann
University of Vienna, Austria

ABSTRACT

The present work states that the analysis and design of decision support systems should consider their impacts on the emotional behaviors of negotiators. This paper provides a brief literature review with respect to this issue, and an outline of a research framework, which explains how to assess and analyze the dynamics of emotional behaviors in text-based negotiations. Subsequently, it provides some results, which show that a decision support system does not mitigate but intensifies emotional behaviors, toward the end of successful as well as failed text-based online negotiations. It is concluded that the research and design of decision support systems should focus more on the impact such systems have on the emotional behaviors of the supported negotiators.

1. INTRODUCTION

For long negotiations were regarded as strictly rational resource allocation or problem resolution processes (Thompson, 1990). Today we, however, know that emotions are important factors of influence in face-to-face negotiations (Barry, Fulmer, & van Kleef, 2004; Kumar, 1997), as well as in electronic negotiations (Brett et al., 2007; Derks, Fischer, & Bos, 2008). Also, we observe that negotiators have to deal with increasing complexities, which, for example, arise out of internationalization tendencies, an increase in time pressures, an increase in negotiation frequencies, or digitalization tendencies. In addition, as well as due to, these complexities, negotiation support tools are used more frequently (Kersten & Lai, 2007), in order to cope with these trends and to improve negotiation
efficiency and effectiveness (Singh & Ginzberg, 1996). Hence, nowadays another important factor of influence in negotiations is support provided to a negotiator (Balzer, Doherty, & O’Connor, JR., 1989; Foroughi, Perkins, & Jelassi, 1995), which is similarly true for the more specialized case of negotiations conducted via an electronic communication channel (Delaney, Foroughi, & Perkins, 1997; Vahidov, Chen, & Kersten, 2013). Importantly, emotions (Barry, Fulmer, & Goates, 2006) as well as negotiation support (Swaab, Postmes, & Neijens, 2004), impact the entire social interaction process that emerges between the negotiators and steers them toward negotiation success or failure. Further, since successful negotiation support intends to improve the outcome of a negotiation by supporting the negotiation process, and since emotions have a strong impact on the entire negotiation process, it is unfortunate that research on negotiation support systems does not put enough weight on this interdependence with emotions. On a theoretical basis, some researchers take a similar stand (Broekens, Jonker, & Meyer, 2010; Bui, 1994) and argue that negotiation support should be expected to have an impact on the emotional behaviors of the supported negotiators. Others more generally argue that support systems affect the social interactions between the negotiators (Kersten & Lai, 2007; Weigand, Moor, Schoop, & Dignum, 2003). What we are, however, still short of is empirical evidence with respect to the impact of electronic negotiation support on the emotional behaviors of the negotiators in and throughout the negotiation process, in electronically mediated negotiations. The main contributions of this paper are to provide a justification and argument for the importance of considering the impact of decision support on emotional behaviors, to introduce and discuss a potential research framework for doing so, as well to provide some initial evidence to support this argument.

2. THEORETICAL BACKGROUND

The present work is focused on the potential impacts of a Decision Support System (DSS) on emotional behaviors in text-based based online negotiations. Strictly speaking, we are dealing with a Negotiation Support System (NSS), which consists of a DSS component provided to each negotiator and an electronic communication component that allows the negotiators to communicate with each other (Lim & Benbasat, 1992-93). If such an NSS is deployed online and used via the Internet it is sometimes also referred to as an Electronic Negotiation System (ENS; Vahidov et al., 2013).

Generally speaking, one major goal of research on NSSs is to develop DSSs that support negotiators throughout the entire negotiation process in order to achieve better outcomes (Delaney et al., 1997). Mostly, a DSS condenses complex information and presents it to its user in a more simple way (Kersten & Lai, 2007), for example, by providing utility values or graphs (Vahidov et al., 2013). This enables negotiators to judge and evaluate alternatives and offers more easily (Moor & Weigand, 2004), and to benchmark these in line with their preferences throughout the negotiation process (Rangaswamy & Shell, 1997). The individual feedback provided by a DSS can thus improve the accuracy of judgments (Arunachalam & Dilla, 1995), which is particularly useful in complex situations (Northcraft, Brodt, & Neale, 1995). Overall, by monitoring the decision making and negotiation process and providing a negotiator with relevant information and feedback (Singh & Ginzberg, 1996), DSSs should manage to reduce cognitive complexities and help negotiators to free up cognitive resources (Kersten & Lai, 2007). Consequently, it is argued that the provision of decision support results in a rationalization of negotiations (Lim & Benbasat, 1992-93) and enables negotiators to address complex problems...