Virtual Negotiations: Intended and Unintended Interactions with Incentive Schemes

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ABSTRACT

Despite a substantial literature concerning the impact of computer-mediated communication (CMC) on decision-making, the potential interaction with an organization's management control system has received little attention. In this study, we use social presence, media richness and media naturalness theories to develop hypotheses concerning the interactions of communication medium with the incentive schemes, a ubiquitous aspect of management control systems. Hypotheses concerning the intended interaction of increased profit and unintended interaction of reduced cooperation will be presented. The results of a laboratory experiment examining the effects of using face-to-face negotiations versus virtual negotiations where buyer-seller dyads determine the price and quantity of transferred goods will be presented. Preliminary results indicate that there is a significant interaction between communication medium and incentive scheme on the measured outcomes.

Keywords: Computer-mediated communication, virtual negotiations, transfer pricing.

OVERVIEW

New communication technologies are offering options that are impacting many aspects of intra-organizational communication. As organizations rely more heavily on virtual interactions, it is important to more fully understand the interactions between virtual communication and the management control system. The purpose of this study is to compare the outcomes of face-to-face negotiations with the outcomes of computer-mediated communication (virtual) negotiations in an intra-organizational transfer pricing scenario.

TRANSFER PRICING

Transfer pricing negotiations for the price and quantity of an intermediate good are a particularly interesting form of negotiation because they contain aspects from both ends of this spectrum. The larger the **quantity** of goods transferred, the larger the profit to be divided between divisions. This aspect could lead to cooperative behavior from the negotiators. But the transfer **price** determines the portion of the profit that goes to each division, which could lead to competitive behavior. Organizations have a stake in the quantity transferred since it determines the profit to the organization. Negotiators have a stake in both the quantity (larger pie to be divided) and the price (size of the slice). Therefore, negotiated transfer pricing is considered to be a mixed-motive situation.

COMPUTER-MEDIATED COMMUNICATION

The computer-mediated communication literature draws on theories that are concerned with social aspects of communication, e.g., social influence (Fulk, et al., 1990), on theories that are concerned with technology, e.g., task-technology fit (Zigurs and Buckland, 1998), and on theories that integrate both aspects, e.g. media naturalness (Kock, 2004, 2005). Social presence theory (Short et al., 1976) predicts that communication is more effective when the medium has the appropriate level of social presence for the level of interpersonal involvement necessary for the task. Media richness theory (Daft and Lengel, 1986), which extends social presence theory, classifies communication media according to its ability to convey nonverbal cues, immediate feedback, personality traits, and natural language. Under media richness theory, the criterion for matching the media to the collaborative task is based on the need to reduce uncertainty. Face-to-face communication is the richest medium. Most intranet- and internet-based media are near the other end of the spectrum and are classified as lean. These theories emphasize using the appropriate medium for the task at hand.

The media naturalness theory (Kock, 2004) proposes that there is a negative causal link between the "naturalness" of a computer-mediated communication medium, which is the similarity of the medium to the face-to-face medium, and the cognitive effort required for an individual using the medium for knowledge transfer. This theory is integrative in that it encompasses previous theories, and it examines the *reasons* why face-to-face and CMC can lead to different outcomes. The task is an aspect of this theory, but the focus is on the cognitive effort required by the difference between 'natural' medium (face to face) and lean CMC mediums.

INCENTIVES

Cooperation and competition can refer to the interdependence between goals. In cooperative situations, the achievement of one person's goals is positively related to the achievement of another person's goals (one person's movement toward their goal facilitates the other person's movement towards their goal). In competitive situations, the achievement of one person's goals is negatively related to the achievement of another person's goals (one person's movement toward their goal interferes with the other person's movement towards their goal). Perceived interdependence of goals can affect group productivity and problem solving ability. One way to create cooperative or competitive situations is through the incentive scheme. Ferrin and Dirks (2003) found competitive versus cooperative reward structures influence actions (e.g., information sharing) and perceptions (e.g., perceived motives and perceived performance of others). Negotiation situations are of special interest because they can vary in the same manner as incentive schemes, from cooperative (win-win, also called integrative) to competitive (win-lose).

HYPOTHESES

Our hypotheses are concerned with the interaction of communication medium with the incentive scheme. Three outcomes are measured and tested, organizational profit, efficiency of the negotiations, and the negotiators' attitudes.

PRELIMINARY RESULTS

Preliminary results indicate that there is a significant interaction between communication medium and incentive scheme on the measured outcomes.

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