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Mobile Communication Technology and Organizations: Impacts on Service Qualities, Employee Satisfaction and Performance

WenShin Chen
University of Houston

MOBILE COMMUNICATION TECHNOLOGY AND ORGANIZATIONS: IMPACTS ON SERVICE QUALITIES, EMPLOYEE SATISFACTION AND PERFORMANCE

WenShin Chen
Bauer College of Business
University of Houston
wenshin@uh.edu

Abstract

The purpose of this study is to examine the impacts of mobile communication technology (MCT) on service operations. Its underlying research question is "Will the use of MCT improve the service operations?" or more specifically, "Will the use of MCT affect employee job satisfaction, performance, and service quality?" The model is presented in Figure 1 followed by propositions suggesting the relationship among factors in the model. Research agenda is next presented and potential contributions and future research avenues are discussed in concluding remarks.

Introduction

The impact of information technology (IT) on organizations has been addressed in many studies (Stratopoulos and Dehning, 2000; Bensaou, 1997; Argyres, 1999). As the Internet and related technologies rapidly developed in the 90s, the impact of IT has become more technology-specific. One such area of increasing attention is mobile communication technology (MCT). MCT's distinguishing feature that allows access to information and communication with people at anytime and at anyplace has made MCT widely adopted (US Congress, 1995). For example, in terms of market growth and economic influence, mobile phone users in the United States grew to 70 million in 1998 from 5.2 million a decade ago (McGinity, 1999). Motorola estimates that mobile users will exceed wired users by 2005 (Economist, 1999).

The purpose of this study thus is to examine MCT's impacts in service operations. The motivation for doing so is twofold. First, economically, the service sector occupies a dominating position in the business world. More than 44 million new jobs have been created in the service sector since 1970. More significantly, approximately 70 percent of national income in the United States is generated by the service sector (Fitzsimmons and Fitzsimmons, 1997). Second, although practitioners have discussed the potential impacts of MCT in the business world (Bartholomew, 2000; Vitiello, 2000) and the influential character of service operations in the information society (Quinn and Gagnon, 1986), little research has examined the relationship between MCT and service operations. Therefore, it will be interesting and informative to learn the answer of the following research question: "Will the use of MCT improve the service operations?" More specifically, "Will the use of MCT affect employee job satisfaction, performance, and service quality?"

Model & Propositions

Mobile Communication Technology

As demonstrated by the model shown in Figure 1, this paper proposes that the use of MCT will impact on internal service quality, employee satisfaction and performance; in turn, these three variables will have impact on external service quality. In measuring service quality, Parasuraman et al. (1988) suggest that five dimensions be considered in a measure of service quality (SERVQUAL): reliability, tangibles, responsiveness, assurance, and empathy. Reliability focuses on whether the service is delivered dependably and accurately; tangibles assess the physical appearance of facility, equipment, personnel, and

communication materials; responsiveness measures the employee's willingness to help clients and to provide prompt service; assurance examines employees' professional knowledge, skill, courtesy upon which clients can build their trust; and empathy involves the sensitive awareness of the client's needs (Parasuraman et al., 1988). Goldman (1998) suggests that MCT is a tool that improves communication between office staffs and remote workers (tangibles); it allows office staffs to respond to remote workers' requests more promptly (responsiveness). Thus, using MCT will improve internal service quality (proposition 1a). Goldman further suggests that the relationship between office staffs and remote workers will be improved through the use of MCT. In addition, Heskett et al. (1994) suggest that better internal service quality will improve employee job satisfaction. The second proposition, therefore, argues that using MCT will improve employee job satisfaction (proposition 1b). Finally, Goldman suggests that using MCT will improve response time, reduce the need to revisit clients because information could be assessed right in the field, and increase productivity because of better communication and faster decision-making. Furthermore, Heskett et al. (1994) suggest that employee job satisfaction will improve productivity and retention. Thus, using MCT will improve employee performance (proposition 1c).

Proposition 1a: the use of MCT has a positive correlation with internal service quality.
Proposition 1b: the use of MCT has a positive correlation with employee job satisfaction.
Proposition 1c: the use of MCT has a positive correlation with employee performance.

Organizational Factors

Heskett et al. (1994) suggest that internal service quality will improve employee job satisfaction, which will lead to enhance employee productivity and retention. Employee productivity and retention will in turn improve external service quality. One may argue that internal service quality could also improve external service quality because service providers to internal customers and external customers are the same. Better internal service quality indicates that one or more service dimensions mentioned above must have been increased; those increased service dimensions will result in better external service qualities as well (proposition 2). In addition, with better internal service quality received, employees should feel more satisfied at work (proposition 3).

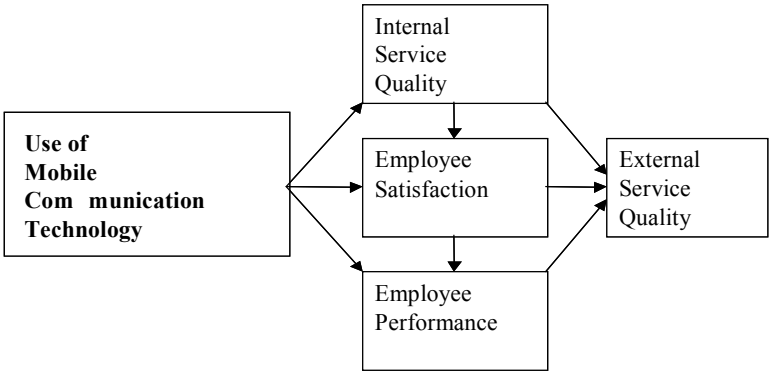

Figure 1. Research Model

In conjunction with Heskett et al.'s suggestion that employee job satisfaction will improve external service quality, one may suggest that satisfied employees will be more willing to provide services quickly (responsiveness) with better courtesy (assurance) and to better understand the needs of customers (empathy). Hence, more satisfied employees will provide better service (proposition 4). Moreover, based on Edwards and Rothbard's argument (2000) that higher work mood (attitude) will result in higher work performance, proposition 5 suggests that more satisfied employees will have a better performance. In service operations, employees are the most important assets with respect to service quality because they are the ones who provide services to customers. Those who have better job performance are more experienced, more skillful, and more willing to provide services. Consequently, better external service quality will be achieved as employees' job performance is enhanced (proposition 6).

Proposition 2: internal service quality has a positive correlation with external service quality.
Proposition 3: internal service quality has a positive correlation with employee job satisfaction.
Proposition 4: employee job satisfaction has a positive correlation with external service quality.
Proposition 5: employee job satisfaction has a positive correlation with employee performance.
Proposition 6: employee performance has a positive correlation with external service quality.

Research Agenda

The sample will be collected from a large mutual fund company's sales department. This decision is based on two reasons. First, sales people are constantly traveling and thus serve as potential MCT users. Second, mutual fund companies are in service operations with high degree of labor and interaction intensity. As stated previously, the purpose of this paper is to examine the

impact of MCT in service operations. This firm/industry, therefore, meets the objective of this paper. The survey will be mailed with three well-established instruments: SERVEQUAL (Parasuraman et al., 1988) (for internal and external service qualities),[1] Quinn and Staines's (1979) five-item measurement (for satisfaction), Heilman et al.'s (1992) four-item rating (for performance). Items for measuring the use of MCT will be self-developed due to no available instrument. Questionnaires are designed to assess the types of MCT that respondents use and the frequency of their usage. Structural equation modeling will be used to analyze the model because of its ability to measure latent variables such as constructs shown in Figure 1.

Concluding Remarks

Since the impact of MCT has not been widely studied, this study offers possible contributions to both practitioners and researchers. To practitioners, as global competition imposes more pressure on the business world, using MCT to constantly communicate with clients and access information through wireless networks offers a significant competitive advantage. Therefore, should propositions be supported, firms would be encouraged to consider using MCT to improve some aspects of their service processes such as internal service quality, employee job satisfaction and performance, and external service quality.

In terms of theory building, the model exhibited in Figure 1 links some organizational factors in service operations to the use of MCT. Its possible contribution, therefore, could apply to several areas. First, in addition to internal service quality, satisfaction, and performance, other organizational factors could also be discussed in relation to the use of MCT and their relationships with external service quality. For example, since MCT allows employees to work remotely without sacrificing performance, the span of control in organizations could be changed; organizational hierarchies might become less centralized, the leadership might need to be more transformational. Consequently, organizational culture and climate may change. Moreover, other factors that might affect employee outcomes and service quality, such as OCB (organizational citizenship behaviors), self-efficacy, could be further discussed to better understand why and how the use of MCT influences those factors. Second, different service firms could be studied and the impact of using MCT could be better understood. For example, according to Schmenner's (1986) model of the service process matrix, four service classifications are allocated within four quadrants with respect to their degree of interaction and labor intensity: service factory (low labor intensity and low interaction), service shop (low labor intensity and high interaction), mass service (high labor intensity and low interaction), and professional service (high labor intensity and high interaction). The mutual fund firm/industry from which this paper intends to collect data is located in the fourth quadrant with high labor intensity and high interaction. Future researchers could consider examining this model by using samples in different service quadrants.

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[1]The difference between internal service quality and external service quality is the service receivers. The instrument to measure their perception of quality should be the same.

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