



Cognitive, demographic, and situational determinants of service customer preference for personnel-in-contact over self-service technology

Françoise Simon^a, Jean-Claude Usunier^{b,*}

^a GRAICO, University of Haute Alsace, Colmar, France

^b University of Lausanne, Graduate School of Business (Faculté des Hautes Etudes Commerciales), Internef, CH-1015 Lausanne-Dorigny, Switzerland

Abstract

This study explores the cognitive, demographic, and situational determinants of the preference for using self-service technologies over personnel-in-contact, with a focus on rational-experiential thinking styles [Epstein, S., Pacini, R., Denes-Raj, V., & Heier, H. (1996). Individual differences in intuitive-experiential and analytical-rational thinking styles. *Journal of Personality and Social Psychology*, 71(2), 390-405]. After an exploratory study of how service customers view service complexity, data are collected through a survey based on face-to-face interviews of adults who use seven different services; these data are analyzed using structural equation modeling. Findings show that (1) rational engagement has a strong positive effect on the preference for technology-based self-services; (2) persons high in experiential style prefer interactions with service personnel; (3) differential wait times have a significant influence on preference for technology; (4) service complexity moderates the influence of cognitive styles on preference for service technology; and (5) age has a negative influence on the preference for service technology. © 2007 Published by Elsevier B.V.

Keywords: Service technology; Cognitive style; Aging; Service complexity; Service encounter

1. Introduction

Researchers recognize the critical importance of technology in the delivery of services, and empirical studies have investigated consumer differences in the use of technology-based self-services (Bitner, Brown, & Meuter, 2000; Dabholkar, 1996, 1994; Dabholkar & Bagozzi, 2002; Meuter, Bitner, Ostrom, & Brown, 2005; Meuter, Ostrom, Roundtree, & Bitner, 2000). Offering technology-based self-services, whether on- or off-site, can result in significant cost savings for companies (Barrett, 1997). As a consequence, many consumers are becoming increasingly familiar with self-service technologies (Burke, 2002). However, some consumers tend to avoid self-service technologies (SST), such as automated teller machines (ATMs) or self-service fuel dispensing, though they have been available for over 30 years and are now at a mature stage (Bateson, 1985; Lee, Lee, & Eastwood, 2003). The present research pertains to the preference of service consumers for personnel-in-contact versus SST and centers on service situations in which both delivery options are established service alternatives. From this perspective, the focus is not on

investigating factors that explain the adoption of new service technology, such as self-scanning (Dabholkar, Bobbitt, & Lee, 2003). Rather, this research explores the role of cognitive styles in explaining the preference for using self-service technologies over personnel-in-contact and applies rational-experiential thinking styles (Epstein, Pacini, Denes-Raj, & Heier, 1996) for the first time in a service marketing context to conceptualize the major facets of how consumers process information. Epstein and colleagues' theory summarizes parallel effects related to the need for cognition (Cacioppo & Petty, 1982), as well as the need for interaction (Dabholkar, 1996), that previous research finds relevant or expects to be determinant factors in the use of technology-based self-services (see Dabholkar, 1996; Dabholkar & Bagozzi, 2002; Langeard, Bateson, Lovelock, & Eiglier, 1981).

Additional causal factors affecting the preference for self-service technologies are demographic variables, especially age, waiting time, and service complexity (Shostack, 1987). Service complexity is expected to have a moderating effect in the influence of thinking styles on preference for SST, because higher service complexity is likely to accentuate the role of need for cognition (Cacioppo, Petty, Feinstein, Blair, & Jarvis, 1996) and make self-service technologies less attractive. Thus, we consider seven services that are classified by exploratory research

* Corresponding author. Tel.: +41 21 692 34 49; fax: +41 21 692 34 95.

E-mail address: Jean-Claude.Usunier@unil.ch (J.-C. Usunier).

into simple services (sending domestic mail, cash withdrawal, car refueling) and complex services (sending international parcels, financial transactions, local rail ticketing, long distance rail ticketing).

Section 2 reviews the literature on SST, cognitive styles, perceived service complexity, demographics, and situational determinants. Section 3 proposes a theoretical model. The research design, as well as measurement issues, is described in Section 4. Section 5 presents and discusses the empirical results of the model, based on confirmatory factor analysis of the scales used and structural equation modeling to test causal linkages between latent constructs. Finally, the last section examines the managerial implications of our findings, their limitations, and directions for future research.

2. Determinants of consumer attitude toward technology-based self-service

Early research related to self-service (Bateson, 1985) makes no systematic distinction between technology-based and labor-intensive services. Langeard and colleagues (1981) show in an experimental study that respondents who did not refuel their own car were less likely to use an ATM and more likely to prefer being served by a bank clerk or choose a traditional full-service restaurant. In contrast, Meuter et al. (2000) argue that avoiding service personnel may be a source of satisfaction and lead to a positive evaluation of SST by some consumers. In addition, Dabholkar (1996) and Dabholkar and Bagozzi (2002, p. 188) find that the need for interaction with a service employee, defined as the “importance of human interaction to the customer in service encounters,” has a negative influence on the use of SST.

In the past few years, a considerable body of research has focused on the adoption of customer interface technologies (see Hammond, McWilliam, & Diaz, 1998; Hoffman & Novak, 1996) and service technology innovations (as in Dabholkar, 1994, 1996; Dabholkar & Bagozzi, 2002; Curran & Meuter, 2005; Curran, Meuter, & Surprenant, 2003). This research is grounded in the literature on the adoption of innovations and the technology acceptance model (e.g., the TAM paradigm; Davis, Bagozzi, & Warshaw, 1989; Gatignon & Robertson, 1991; Rogers, 1995). Moreover, it has been shown that pre-adoption behavioral beliefs differ from post-adoption beliefs with regard to information technologies (Karahanna, Straub, & Chervany, 1999).

In this paper, the focus is not on the investigation of attributes of the automated interface that facilitate the adoption of self-service. Instead, the research questions are based on services for which both personnel-in-contact and service technology will remain service options in the future, though innovations are bound to replace former product or service solutions in the long run. Our perspective centers on preferences for rival but stable service alternatives in terms of human contact versus technology.

2.1. Rational-experiential individual thinking styles

The cognitive-experiential self-theory (Epstein, 1991, 1994), hereafter referred to as CEST, proposes that people have two

fundamentally different but parallel modes for processing information:

- (a) A “rational” system in which the person operates primarily at the conscious level. It is intentional, analytical, verbal, and relatively affect free;¹ and
- (b) An “experiential” system that is more automatic, pre-conscious, holistic, and “associalistic,” according to the term coined by Epstein (1994). It is also primarily non-verbal and intricately associated with affect.

A basic assumption in CEST is that all human behavior is simultaneously influenced by both systems, with their relative contribution varying according to the situation and the person (Epstein et al., 1996; Pacini & Epstein, 1999). From a situational point of view, CEST predicts that interpersonal interaction relates to the experiential system, whereas reasoning and problem solving mobilize the rational system. People differ in the degree to which they characteristically rely on one system rather than the other, and individual differences are measured with rationality and experientiality scales (Epstein et al., 1996; Pacini & Epstein, 1999). Behavior is a joint function of both modes of processing, in which rationality and experientiality scales are independent (Epstein et al., 1996, p. 395; Pacini & Epstein, 1999).

As such, rational-experiential thinking styles may be expected to be relevant in explaining attitudes toward SST, because consumers anticipate and actually make much mental effort when using it. Difficulties in navigating the interface can be approached by using Green’s “cognitive dimensions framework” (Green, 1989; Green & Petre, 1996). It identifies cognitive traps for users, such as hidden links, low visibility of information, system resistance to change initiated by users, cognitive effort required to meet particular goals, or premature choices imposed on users. Our assumption is that SSTs involve more cognitive effort than traditional interactions with service personnel for two basic reasons: (1) customers often experience difficulties in navigating the interface associated with an SST and (2) unique features of face-to-face communication cannot be duplicated in automated service.

In contrast to automated interaction, face-to-face communication allows the transmission of implicit and pragmatic messages that help interpret propositional content (Thomas, 1992). Service representatives can provide their experiences and personal opinions. Non-verbal communication modifies the semantic content of the exchange and helps present information more vividly than written communication (Gabott & Hogg, 2000). Moreover, questions can be asked by consumers to service personnel to avoid elaborative information processing. Answers from service personnel provide feedback to consumers and enable them to verify and fine-tune information that was explicitly stated in the interaction (O’Brien, Shank, Meyers, & Rayner, 1988).

Through narrative processing during engagements with employees, the experiential system combines “concrete exemplars into meaningful wholes by arranging them in a form that

¹ The CEST is partially grounded in the concept of need for cognition (Cacioppo & Petty, 1982; Cacioppo et al., 1996) with regard to the rational thinking style.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات