

Frontline employee motivation to participate in service innovation implementation

Susan Cadwallader · Cheryl Burke Jarvis ·
Mary Jo Bitner · Amy L. Ostrom

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Abstract Companies today face the challenge not only of designing innovative customer-focused service strategies to compete and grow but also of translating such strategies into results through successful execution. Experience and research demonstrate the difficulty of such an execution, but little research in marketing has focused on strategy implementation, particularly at the employee level. Prior research has suggested that frontline employee participation is critical to successful innovation implementation, especially in service contexts. We develop a theoretical model to investigate the complex role of motivation in engaging employee participation in service innovation implementation and test it with field data from a real-world context.

The study contributes to motivation research in marketing by adapting and extending a hierarchical conceptualization from psychology that incorporates three levels of motivation: global, contextual, and situational. We also investigate the antecedents managers can control to increase employee motivation to participate in implementation efforts and subsequently to improve participation behaviors that are critical to the successful implementation of a customer service innovation.

Keywords Services marketing · Employee motivation · Service innovation · Strategic implementation

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S. Cadwallader (✉)
Mihaylo College of Business and Economics,
California State University, Fullerton,
P.O. Box 6848, Fullerton, CA 92834-6848, USA
e-mail: scadwallader@fullerton.edu

C. B. Jarvis
College of Business, Southern Illinois University, Carbondale,
Mail Code 4629, Carbondale, IL 62901, USA
e-mail: cbjarvis@cba.siu.edu

M. J. Bitner · A. L. Ostrom
W. P. Carey School of Business, Arizona State University,
P.O. Box 85287-4106, Tempe, AZ 85287-4106, USA

M. J. Bitner
e-mail: maryjo.bitner@asu.edu

A. L. Ostrom
e-mail: amy.ostrom@asu.edu

Introduction

Key challenges for businesses today are the dual objectives of “innovation” on the one hand and “execution” on the other hand. Both practitioners and academics acknowledge that innovation is a critical driver of growth and competitive success (Clark 2007; Denning 2007; Sawhney et al. 2006). Given the importance of services in developed economies (e.g., in the United States, services generate more than 80% of the gross domestic product and employ more than 80% of the working population), service innovation is essential for growth (Berry et al. 2006; Michel et al. 2008; Sheehan 2006). However, managerial experience and empirical research suggest that even high-potential innovations are likely to fail without successful execution (Noble and Mokwa 1999; Walker et al. 2002). A Harvard Business School study of *Fortune* 100 firms, in which each firm had invested \$1 billion in strategic initiatives during a 15-year period, shows that only 30% of those initiatives improved bottom-line results exceeding the companies' cost of capital, and only half resulted in

improved market share prices (Pascale et al. 1997). Organizations increasingly must demonstrate that they can translate innovative strategies into results (McKnight and Hawkrigg 2005). While successful translation from strategy to results depends on a range of organizational, managerial, environmental, and competitive factors, often it is highly dependent on the actions of frontline employees, who are the focus of the current research.

In the marketing literature, relatively little attention has been given to factors contributing to successful innovation implementation. In executing an innovative strategy, firms can identify the ideal process blueprint for the organization and secure the best technology money can buy, but it takes people to make it all work (McKnight and Hawkrigg 2005). Noble and Mokwa (1999) note that the few examples of implementation research that do exist rarely focus on employee-level factors, focusing instead on the organizational level, and, in general, are not grounded in strong theory. There are a few exceptions in the literature that focus on employee-level factors in the implementation of strategic initiatives. For example, Porter and Smith (2005) investigate managers' abilities to anticipate and respond to implementation problems. Chimhanzi and Morgan (2005) focus on how the interaction between the human resources and marketing departments (e.g., frequency of communication, amount of interfunctional conflict) affects employee relationships and, thus, the effectiveness of strategic implementation efforts. Rapert et al. (2002) examine the roles of both interfunctional employee communication and consensus on strategic priorities in the implementation process. From this review, it is clear that organizations that do not focus on employee commitment, understanding, and capabilities at the beginning of a strategic change run the risk of wasting time and money trying to resolve internal problems later (Averett 2001).

In the case of a service innovation, the role of frontline employees in successful implementation can be especially important because employees often “are the service” in service contexts (Zeithaml et al. 2009, p. 352). As such, service innovations will succeed only insofar as the employees embrace, execute, and promote them. This issue is made even more complex because service innovations may affect employees' roles, requiring significant changes in behavior, and, in some cases, may even eliminate their jobs. Service innovations also frequently require significant changes in customer behavior. Prior research has suggested that consumer education or training plays a role in helping customers know which behaviors to adopt and how to perform them (Dellande et al. 2004; Lovelock and Young 1979). When a service is complex (e.g., automobile repair), the relationship between service provider and consumer is key (Crosby et al. 1990); thus, frontline employees may serve a critical role in introducing and explaining service

innovations to their customers. As a result, employees' motivation to participate in implementing a service innovation may help determine whether they serve as facilitators or barriers in its success.

Our objective in this study is to understand the complexities underlying employee motivation to participate in the implementation of a service innovation aimed at improving customer service and enhancing customer satisfaction. *Motivation* is defined as the degree to which a person wants and chooses to engage in specified behaviors (Mitchell 1982). Although motivation has been investigated in marketing as an important underlying driver of behavior in contexts as wide ranging as end-user adoption of technology (e.g., Childers et al. 2001; Nysveen et al. 2005; Venkatesh, 2000) and sales force management (e.g., Kohli 1985; Oliver and Anderson 1994; Weitz et al. 1986), no research has yet explored the antecedents and consequences of motivation relevant to employee participation in the implementation of a service innovation. To achieve this objective, we develop and test a theoretical model of employee motivation in the context of a real-world business setting in which the innovation is a customer self-service technology being integrated into an existing organizational structure.

The study focuses on what Noble and Mokwa (1999) note as most in need of investigation in the study of strategic execution—that is, employee-level factors grounded in strong theory. The model is grounded in and extends the work in self-determination theory (SDT; Deci 1971, 1975; Deci and Ryan 1985b, 2000), and the study contributes to motivation research in marketing by introducing Vallerand's (1995, 1997) hierarchical model of motivation into the literature. The model provides a deeper and more complex view of motivation than is found in marketing studies to date. In addition, we adapt and extend Vallerand's original motivation model to investigate a set of antecedents or situational factors affecting employee motivation that are under managerial control. The results of the study suggest opportunities for employers to design organizational systems in such a way as to increase employee participation in innovation implementation to improve executional success.

The research presented here contributes to the marketing literature by placing frontline employees squarely within the theoretical domain of innovation implementation. We also apply and test a deeper and more complex theory (Vallerand 1995, 1997) of employee motivation than has been seen previously in our literature. Finally, we also contribute back to the original theory by testing the full Vallerand model in a real-world work context, introducing additional antecedent predictors. In the sections that follow, we develop our theoretical framework and hypotheses, describe the research methodology and analysis, and then

conclude with a discussion of the results and implications for both theory and practice.

Theoretical framework and hypotheses

Motivating customer-contact employees

Research shows that investments in service employee success drive sustained business success; frontline employees not only facilitate the delivery of quality services but also play important roles in marketing the firm, creating satisfied customers, and building customer relationships (Berry 1999; Gwinner et al. 2005; Hennig-Thurau et al. 2006; Singh 2000).

Frontline employees also often are responsible for introducing customers to new service innovations. Those serving the boundary-spanning role between company and customer are intimately involved in the implementation of such strategic initiatives, serving as either catalysts or barriers to customer awareness and eventual acceptance and adoption of the service innovation. The current research addresses the need for a better understanding of what motivates employees to participate in service innovation implementation. Specifically, we focus on understanding the underlying theoretical complexities of employee motivation to participate in the implementation of a new customer-facing service strategy.

To build this understanding, we move beyond the current theoretical approach to motivation in the marketing literature. Here, motivation has been explored most often as a personality-level trait both in consumer contexts (e.g., Batra and Ray 1986; Dholakia 2001; MacInnis et al. 1991) and in employee settings, in which it has been investigated primarily in the field of sales force management (e.g., Anderson and Oliver 1987; Ingram et al. 1989; Kohli 1985; Walker et al. 1977). The measures of motivation used in marketing often are derived from either an expectancy theory or an attribution theory approach, and they acknowledge a distinction between intrinsic and extrinsic motivation (e.g., Oliver and Anderson 1994; Pullins 2001; Tyagi 1985; Walker et al. 1977; Weitz et al. 1986). The intrinsic/extrinsic motivation dichotomy captures whether someone is motivated internally (“I sell for the pleasure of it”) or externally (“I sell because I get paid to”). Another approach in marketing is Mowen’s (2000) 3M Model of Motivation and Personality, which posits a hierarchy of personality traits (e.g., agreeableness, competitiveness, job resourcefulness) that have a “motivational quality” in generating change in a person’s behavior (Licata et al. 2003, p. 257).

In this study, we adapt and build on the model originally offered by Vallerand (1995, 1997) as an extension of the SDT of motivation (Deci 1971, 1975; Deci and Ryan

1985b, 2000). The results from SDT studies conducted in several life domains provide evidence that self-determined styles of behavior regulation are associated with higher levels of creativity (Amabile 1997); enhanced learning, interest, and enjoyment (Black and Deci 2000); and a healthy persistence (Pelletier et al. 2001). The Vallerand model itself has been applied and widely accepted in a variety of fields, including education (Vallerand et al. 1997), health care (Vallerand et al. 1995), sports (Vallerand 1997; Vallerand and Brière 1997), and work (Richer et al. 2002). The model considers both the continuum of self-determined motivation (e.g., types of motivation) and the hierarchy of global-to-contextual-to-situational levels of motivation. In the context of this study, we attempt to increase marketers’ understanding of how motivation works to influence desired employee behaviors, including, but not limited to, employee participation in innovation implementation. Applying and extending this model will provide insight into the aspects of employee motivation that can be successfully influenced by managerial action, as opposed to the aspects that are truly hardwired personality traits that cannot be changed.

Although SDT is well studied and the Vallerand model has been tested in parts in many contexts, this research is the first to measure and model within a single study Vallerand’s (1995, 1997) full set of propositions—that is, all three levels of motivation, three types of motivation and their underlying regulations and subtypes, and an entire sequence of antecedents and consequences at the situational level. For example, Grouzet et al. (1999) studied the entire antecedent→motivation→consequence sequence at the situational level but did not concurrently measure the global, contextual, and situational motivational hierarchy. Guay et al. (2003) studied the global, contextual, and situational motivational hierarchy but did not examine the entire sequence of antecedents and consequences at any level of the hierarchy. Philippe and Vallerand (2008) tested the antecedent→motivation→consequence sequence at the contextual level in a study on nursing home residents but did not address global or situational motivation. Therefore, we believe that this study contributes to the source literature of the motivation model applied here.

SDT of motivation

To be motivated means to be moved to do something. Thus, a person who feels no impetus or inspiration to act is characterized as unmotivated, whereas “someone who is energized or activated toward an end” is considered motivated (Ryan and Deci 2000, p. 54). Most theories have treated motivation as a unitary concept that varies primarily in amount (e.g., Bandura 1996), such that people with more motivation will aspire to greater achievement and be more

successful in their efforts than people with less motivation. In contrast, SDT maintains that there are different types of motivation and that, in general, the type of motivation is more important than the amount in predicting life’s important outcomes.

To be self-determining means to experience a sense of choice in initiating and regulating one’s own actions (Deci et al. 1989, p. 580; Deci and Ryan 1985b). Regulation is an internalized principle, value, or condition (e.g., individual sense of control) that customarily governs behavior. Self-determination theory asserts that people are inherently motivated to internalize or take in a value or regulation and then to integrate or transform the regulation into their own sense of self, which results in greater persistence, more positive self-perceptions, and better performance quality (Ryan and Deci 2000). This process results in regulatory styles that reflect varying degrees of self-determination, and the more internalized a value or regulation, the more it is experienced as autonomous (Ryan et al. 1985). It is important to recognize that all types of autonomous and controlled motivation reflect a person’s intention to act, though they may result in different quality outcomes (Deci and Ryan 2008). Thus, when the quality of motivational orientations is evaluated, the distinction between autonomous and controlled is more important than the distinction between intrinsic and extrinsic (Shahar et al. 2003). For example, Deci et al. (1989) found that it is possible to make a significant change in the workplace by training managers to support their subordinates’ self-determination.

Self-determination theory has evolved over the past three decades as a set of four mini-theories: cognitive evaluation theory (CET) (Deci 1971, 1975; Deci and Ryan 1980), organismic integration theory (Deci and Ryan 1985b; Ryan and Connell 1989), causality orientations theory (Deci and Ryan 1985b), and basic needs theory (Ryan and Deci 2000). This research focuses on the first (and the most relevant for this context) of these mini-theories.

The continuum conceptualization of motivation

Relative to CET, Deci and Ryan (1985b, 2002) propose a continuum of motivation that ranges from relatively

controlled regulatory processes to those that are more self-determined or autonomous. Autonomous motivation involves behaving with a full sense of volition and choice, whereas controlled motivation involves behaving with the experience of pressure that comes from forces perceived as external to the self (Deci and Ryan 1985b, 2002). Since its introduction in psychology, this broader view of motivation has been applied, tested, and well accepted in a variety of contexts, including the workplace (e.g., Amabile 1997; Deci et al. 1989; Gagné and Deci 2005). According to this conceptualization, a person’s motivation can be visualized as existing along a continuum from non-self-determined at the one end to fully self-determined behavior at the other end (see Fig. 1).

This continuum presents three types of motivation that range from amotivation (AM) (the state of lacking the intention to act, which has been ignored in the marketing literature) on the one end, to extrinsic motivation (EM) in the middle, to intrinsic motivation (IM) at the other end. It also presents regulatory styles, aligned with these types of motivations, based on the person’s different assessments of self-determination. Underlying EM and IM are forms of regulation ranging from external and introjected (e.g., more controlled) to identified, integrated, and intrinsic (e.g., more autonomous). AM is considered non self-determined and, as such, non-regulated. Investigating the full breadth of the continuum of motivation will enrich marketing’s measurement of the construct beyond the intrinsic/extrinsic dichotomy and enable us to capture the full range of motivated behaviors that employees or customers exhibit.

As Deci and Ryan (2002) describe, the left end of the continuum is AM. When people are amotivated, either they do not act at all or they act passively. Thus, amotivation results when a person believes that he or she is unable to achieve desired outcomes either because of a lack of contingency (Rotter 1966; Seligman 1975) or of perceived competence (Bandura 1977) or because he or she does not value the activity or the outcomes it would yield (Ryan 1995).

At the right end of the continuum is IM, or the state of doing an activity out of interest and inherent satisfaction.

Figure 1 Motivation continuum.

Type of Motivation	Amotivation	Extrinsic Motivation				Intrinsic Motivation		
Type of Regulation	Non-Regulated	External Regulation	Introjected Regulation	Identified Regulation	Integrated Regulation	Intrinsic Regulation		
						IM to Accomplish	IM to Know	IM to Experience Stimulation*
Quality of Behavior	Non Self-Determined					Self-Determined		

Source with the exception of 3 types of Intrinsic Regulation: Deci and Ryan 1985b, 2000, 2002.
 *Source with the addition of 3 types of Intrinsic Regulation: Vallerand 1995 and 1997.

Although many researchers have approached IM as a single, global construct, Vallerand and colleagues (Vallerand 1995, 1997; Vallerand et al. 1989; Vallerand et al. 1992; Vallerand and Ratelle 2002) construct a tripartite taxonomy of IM. Although other researchers (e.g., Deci 1971, 1975; Deci and Ryan 2002) suggest that IM could be differentiated into more specific motives, they have not indicated which subtypes of IM follow from the more general IM construct. Vallerand et al. (1989) posit a taxonomy based on the IM literature that reveals the presence of three subtypes of IM that have been researched independently: (1) IM to know (Gottfried 1985), (2) IM to accomplish (Harter 1981), and (3) IM to experience stimulation (Csikszentmihalyi 1975). The first subtype, *IM to know*, implies engaging in activities because of the pleasure and satisfaction derived from learning, exploring, and understanding new things. The second subtype, *IM to accomplish*, refers to engaging in activities because of the pleasure and satisfaction derived from trying to surpass oneself, creating something, or accomplishing something. The third subtype, *IM to experience stimulation*, operates when one engages in an activity to experience pleasant sensations associated mainly with one's senses (e.g., sensory and aesthetic pleasure).

The middle of the continuum consists of EM, which refers to a broad array of behaviors in which people engage not for reasons inherent in the behaviors per se but rather for instrumental reasons—that is, people undertake the behaviors to attain an end state that is separate from the actual behavior. Deci and Ryan (1985b) establish a typology of EM in which the four forms (e.g., regulations) of EM vary in their degrees of self-determination, ranging from more controlling to more autonomous. The first form is *external regulation*, in which people perform acts to attain a positive end state (e.g., to get money) or to avoid a negative end state (e.g., to avoid reprimand), which are separate from the activity itself. This is the least self-determined form of EM. The second form is *introjected regulation*, in which people take prompts from the environment and begin to internalize them as reasons for their behaviors, but the motivation is still not self-determined because the person acts out of obligation to avoid feeling shame and internal pressure. The third form is *identified regulation*, in which the reasons to engage in the activity are internalized such that the person judges the activity to be valuable and thus performs the activity with a sense of choice. The fourth form of EM is *integrated regulation*, the most autonomous form of extrinsically motivated behavior; it results when an activity judged to be valuable is integrated with other aspects of the person's self. Behaviors governed by integrated regulation are considered extrinsic rather than intrinsic because they are done to attain personally important outcomes rather than for their inherent enjoyment.

Hierarchy of motivation

In addition to the conceptualization that types of motivation and regulations fall along a continuum, Vallerand (1995, 1997, 2000) proposes a hierarchy that accounts for motivation at three levels of generality and for the relationship among the levels, and then incorporates the three motivation types and their underlying regulations suggested by SDT. Although Deci and Ryan (1985b, 2000) discuss how the levels of motivation—personality (or global), domain (or contextual), and state (or situational)—are theoretically related, they do not specify a formal integrated model of the relationships among them. Vallerand's (1997) hierarchical approach models the effects of motivation from the top down—from global to contextual to situational—such that motivation at one level has a stronger impact on motivation at the next lower level than on motivation at a more distant level (Deci and Ryan 1985b, 2002; Vallerand 1997). To date, only one study has tested this top-down conceptualization of motivation. Guay et al. (2003) found significant effects in the relationships from global motivation→contextual motivation to education→situational motivation toward an academic task.

The top level of generality refers to a global motivational orientation at the personality level. *Global motivation* involves relatively enduring individual differences with respect to people's motivations (e.g., self-starter, ambitious, extrovert). The second level, *contextual motivation*, addresses generalized motivation toward broad life contexts, such as interpersonal relationships, work, education, religion, sports, and technology. This level refers to a self-referent system people use to describe their motivation in a particular sphere of activities (Guay et al. 2003). Because contextual motivation is more subject to change than global motivation, it is likely to be a better predictor of behavioral change (Vallerand 1997); thus, it is important to incorporate it in motivation models. The third hierarchical level is *situational motivation*, or motivation to participate or continue to participate in a specific activity (e.g., attending exercise class, using a database program, taking a medication on time). This is motivation a person experiences when he or she is involved in an activity; it has been referred to as “the here and now of motivation” (Vallerand 1997, p. 293).

Employee motivation to participate in innovation implementation

We focus here on employees' situational motivation regarding participation in the implementation of a technology-based service innovation (participation is operationalized in this context as recommending the innovation to customers). We operationalize situational motivation as a multidimensional variable that captures employees' AM,

EM, and IM to participate in the implementation process. According to Vallerand (1997), this specific level of motivation would be influenced first by broader types of motivation related to the context. For example, contextual motivation regarding technology in general is one type that might affect employee motivation to participate in an innovation involving technology. For example, if employees enjoy learning about and mastering new technology, they may want to participate in making a specific new technology innovation a success by recommending it to customers. Another type is contextual motivation related to work. That is, employees who are motivated to succeed at work are likely to be more engaged in and motivated to deal with work-related tasks, such as recommending a service innovation to customers. We operationalize contextual motivation regarding technology and contextual motivation regarding work as multidimensional constructs that capture an employee’s AM, EM, and IM toward technology and his or her current job and work environment, respectively. An employee’s global motivation should influence both sources of contextual motivation. Global motivation is operationalized as a multidimensional

construct that captures an employee’s AM, EM, and IM to do activities in general (Vallerand 1997). Therefore, we hypothesize the following:

Hypothesis 1: At the global level, employee motivation is positively related to (a) employee contextual motivation regarding technology and (b) employee contextual motivation regarding work.

Hypothesis 2: At the contextual level, (a) employee motivation regarding technology and (b) employee motivation regarding work are positively related to employee situational motivation to participate in innovation implementation.

Figure 2 shows these relationships and the remainder of the hypotheses we subsequently propose.

Managerial antecedents to motivation: A mediational view

Cognitive evaluation theory (Deci 1971, 1975; Deci and Ryan 1980) was formulated to describe the effects of social

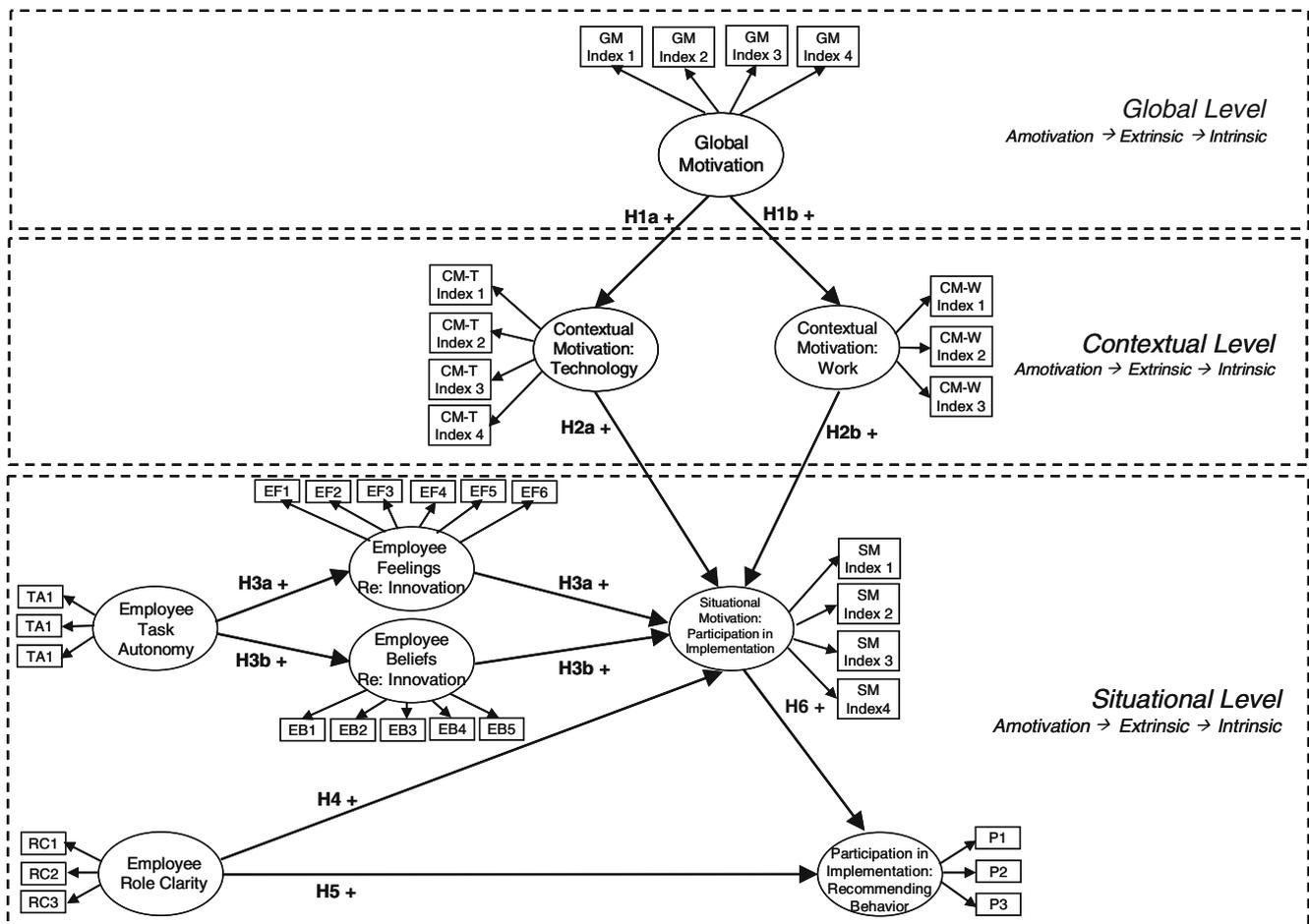


Figure 2 Conceptual model and hierarchical levels of motivation.

contexts on people's intrinsic motivation, including their perceptions of the need for autonomy, which (along with the need for competence and relatedness) is hypothesized to mediate external/social factors that either enhance or degrade self-determined motivation. According to CET, social factors affect motivation through their impact on peoples' perceptions of autonomy, competence and relatedness because these perceptions relate to fundamental human needs individuals seek to satisfy. Autonomy in this sense reflects a desire to engage in activities of one's own choosing, to be the origin of one's own behavior (Deci and Ryan 1980), and is considered a basic or innate, universal psychological need—one that is different from the broader idea of formulated or acquired personal motives or desires (Deci and Ryan 2002).

SDT posits that there are clear and specifiable social-contextual factors that influence motivation (Deci and Ryan 2002). In addition to the hierarchy of motivation described in the previous section, Vallerand (1995, 1997) posits a causal sequence that includes antecedent social factors, mediated by perceptions (e.g., the need for autonomy, competence, relatedness), that influence motivation, which in turn drives consequences (e.g., desired behaviors).

In this study, we elected to view the relationship among the social factors, the CET mediators, and motivation differently because several researchers in the work motivation domain suggest that other mediators offer greater explanatory power. Several researchers (Hackman and Oldham, 1976; Saavedra and Kwun 2000; Dodd and Ganster 1996; Foote et al. 2005) have provided conceptual and theoretical arguments suggesting that affect and cognition are not outcomes of motivation but rather are important *mediators* that influence the quality of motivation and, ultimately, its behavioral consequences.

At the situational level in a marketing context, some social factors may be under managerial control, offering managers the opportunity to leverage these factors to influence employee affect and cognition and thereby impact employee situational motivation. One such factor is task autonomy. We borrow the definition of *task autonomy* from the management literature, specifically that used by Langfred and Moye (2004, p. 935), which was based on Hackman and Oldham's (1980) job characteristics theory: the "degree to which an individual is given substantial freedom, independence, and discretion in carrying out a task." Task autonomy is more specific than job autonomy—a job can consist of multiple tasks, with variation in the amount of autonomy granted across those tasks. Task autonomy has been found to be positively related to affective organizational commitment (Agarwal and Ramaswami 1993) and, in general, is expected to result in greater employee motivation, satisfaction, and performance (Argote and McGrath 1993; Dwyer et al. 1992; Hackman and Lawler 1971; Loher et al. 1985; Spector

1986). Thus, for our context, employees who have task autonomy regarding whether to participate in the implementation by recommending the service innovation to their customers, and therefore who believe they have a choice to do so, are more likely to be motivated to make that recommendation.

Although there is evidence supporting a relationship between task autonomy and situational motivation, the psychological process through which task autonomy may influence situational motivation has not been empirically tested. It has been suggested that task autonomy leads to feelings of responsibility for the outcomes of the work (Hackman and Oldham 1976), which may increase motivation. However, task autonomy also may change employees' feelings toward and beliefs about the task. Here, we define *employee feelings toward the innovation* as evaluative responses that are affective in nature regarding the service innovation and *employee beliefs about the innovation* as responses that are cognitive in nature regarding the service innovation.

Having more control over a task may make people more positively disposed toward the task. Saavedra and Kwun (2000) and Dodd and Ganster (1996) found a significant, positive relationship between task autonomy on the job and job affective states, supporting the idea that employees with more autonomy regarding the task should feel more positively about the innovation. Likewise, given that our focus is on the act of recommending, having the choice to recommend a service innovation to customers may itself lead employees to perceive the innovation as more valuable. Thus, task autonomy may lead to more positive employee cognitions regarding the innovation.

Therefore, employees who feel and think more positively about the innovation should be more motivated to participate in its implementation. For example, Foote et al. (2005) found that employees' attitudes (affect and cognition) toward self-directed work teams were positively related to their commitment to implement a team concept. These findings and others (Dodd and Ganster 1996; Hackman and Oldham 1976; Saavedra and Kwun 2000) suggest that affect and cognition are not outcomes of motivation but rather are important mediators that influence the quality of motivation and, ultimately, its behavioral consequences. Thus, we hypothesize that employee feelings toward and beliefs about the service innovation mediate the relationship between task autonomy and situational motivation to participate in the implementation process.

Hypothesis 3: Employees' (a) feelings toward and (b) beliefs about a service innovation mediate the positive effect of task autonomy on situational motivation to participate in innovation implementation.

Employees' role clarity is another construct managers potentially can leverage to increase motivation. A "role" is a set of expectations or norms applied to the incumbent by others in the organization; thus, employees with high role clarity possess a clearer understanding of their requirements (Whitaker et al. 2007). Role clarity has been investigated in the context of employees' roles (Woodard et al. 1994), consumers' roles (Meuter et al. 2005), and channel members' roles (Teas and Sibley 1980). Role clarity is the degree to which targets understand how they are expected to perform their tasks (Teas and Sibley 1980), or knowledge about what to do regarding a particular role or task (Meuter et al. 2005). There is some evidence that understanding what to do can increase perceived ability, which in turn can increase motivation to perform the role (Bowers et al. 1990; Dellande et al. 2004). Given that the ability to recommend the service innovation would be invariant across employees, employees who understand their role in participating in the implementation should be more motivated to do so.

Hypothesis 4: Role clarity regarding recommending a service innovation to customers is positively related to situational motivation to participate in service innovation implementation.

Behavioral outcomes of motivation and role clarity

Prior work in human resources and industrial psychology consistently suggests that both motivation and role clarity affect employee performance and play a role in creating behavioral change (Bowen 1986; Schneider and Bowen 1995; Vroom 1964). More recently, these factors have been used to examine customer co-production in the context of services. Dellande et al. (2004) found that motivation and role clarity were positively related to customer compliance in a health care context. Meuter et al. (2005) found that motivation and role clarity were significant predictors of customers' trial of a newly introduced self-service technology. Thus, both motivation to participate in a task and role clarity in how to perform the task are critical in determining whether an employee (or customer) will successfully complete a task.

In this context, we examine employee participation in a strategic implementation process by recommending a service innovation to customers. We operationalize employee participation in an innovation implementation to include (1) employees' current recommending behavior regarding the service innovation to their customers and friends/family and (2) their future intentions to recommend to customers. In line with prior work, employees with higher levels of situational motivation to participate in service innovation implementation should more readily do

so (by fulfilling the task of recommending it to others) than employees with lower levels of situational motivation. Similarly, the more clear employees are regarding their role in recommending the innovation and the more they understand what to do, the more likely they are to recommend it. Therefore, we expect to find significant direct relationships between recommending behavior and role clarity and situational motivation.

Hypothesis 5: Role clarity is positively related to employee participation in innovation implementation (recommending behavior).

Hypothesis 6: Situational motivation to participate in innovation implementation is positively related to employee participation in innovation implementation (recommending behavior).

Methodology and analysis

Research context and sample

This study coincided with a pilot test of a new customer self-service technology innovation by an automobile manufacturer and its dealer network. The service innovation was an online (computer) system designed to enable the dealerships' customers to schedule their own auto service appointments, view maintenance schedules and pricing, and check for any manufacturer recalls. These were all functions that previously required either telephone or personal interaction with a service department employee. The innovation was designed and implemented with the goal of improving dealership efficiencies in terms of both time and money and increasing customer satisfaction. However, in exploratory interviews conducted before this study with 13 managers and customer sales and service employees at three dealerships, it was indicated that customer adoption of the innovation proved to be significantly dependent on the involvement—or lack of involvement—of employees in the implementation process. For example, a general manager said, "To get customers to change, we must change our service writers' habits. We need to wean customers off the service writer." A salesperson stated, "[Customers'] initial fear of the [new online system] is overcome with a demonstration. A demonstration is the key."

Employees could introduce the online system to customers, educate them on how to use the technology, and encourage them to try it and use it on a regular basis through a variety of means, including (1) through in-store hands-on demonstration, (2) verbally in person or by telephone, or (3) by e-mail or direct mail. Thus, the

research context involved a distinct role of frontline service employees in the introduction of a strategic service innovation, and their motivation to participate and play that role could have a significant effect on the innovation's success or failure.

A written survey was conducted at 16 dealerships participating in the company pilot test, with questionnaires administered to 328 sales and service employees with frontline customer-contact responsibility. Power analysis (guided by MacCallum et al. 1996) suggests that a sample of 66 respondents is needed to obtain a standard 0.80 power level, based on a test of exact fit, given our model with 546 degrees of freedom at the 0.05 alpha level. With a sample size of 328, the power of this model approaches 1.0, indicating that the sample is more than sufficient for this model.

The manufacturer allowed us to conduct the study on completion of the company's pilot implementation program. The manufacturer selected a judgment sample of dealerships participating in the pilot according to perceived willingness to cooperate in the study. A convenience sample of dealership employees was identified, based on those who were working the day of our on-site visit. Questionnaires were administered and collected in person to ensure confidentiality for all participants. All employees who were approached completed the survey. Analysis of employee characteristics showed no significant differences ($p < 0.05$) between dealerships on measures of employee age, years of experience in the position, years of education, level of self-assessed Internet expertise, or level of Internet usage (both measured on seven-point Likert scales).

Measurement and confirmatory factor analysis (CFA)

Most items were collected on seven-point Likert or semantic differential scales. Scale items for all constructs (along with their CFA item loadings) appear in Appendix A.

Task autonomy was measured with a three-item Likert scale that captures employee feelings of independence and discretion in deciding whether or how to carry out the task of recommending the service innovation. It was based on similar task or work autonomy scales, such as those created by Breugh (1985). Role clarity was measured with a three-item Likert scale adapted from Meuter et al. (2005).

Employee feelings toward the service innovation were measured with a six-item semantic differential scale similar to scales used in various marketing contexts (see Holbrook and Huber 1979; Stuart et al. 1987). Employee beliefs about the service innovation were measured with a five-item Likert scale based on the "attitude toward a brand" scale developed by LaTour et al. (1996), in which the evaluation object is judged by the

rater on several criteria (i.e., value, appeal, usefulness). In our case, we adapted this scale to the specific evaluative criteria relevant to the context of the strategic innovation's introduction and asked the employees to evaluate the innovation on the basis of its value to the dealership and customers, its appeal in terms of improving processes, and its usefulness in terms of convenience for the customer and saving the dealership time.

The outcome measure of employee participation in implementation (recommending behavior) was measured with a self-reported three-item Likert scale, designed to capture both current recommendations to customers and word-of-mouth behaviors with family/friends and behavioral intentions to continue recommending the innovation to customers in the future.

To empirically test the motivational levels and their relationships theorized by the hierarchical model of motivation, Vallerand and colleagues (Blais et al. 1990; Guay et al. 1999; Guay et al. 2000) developed and validated scales to assess the global, contextual, and situational levels of motivation. In creating the General Causality Orientations Scale (GCOS) to assess self-perceptions of causation of behavior, Deci and Ryan (1985a) found support for a scale that included AM, IM, and external, introjected, and identified forms of EM. Guay et al. (1999) then developed the Global Motivation Scale (GMS) to assess global motivation in a more differentiated manner than the GCOS. The resultant scale included IM to know, IM to accomplish, and IM to experience stimulation; the external, introjected, and identified regulation forms of EM; and AM. Guay et al. (2003) confirmed the seven-factor structure and reliability of the scale in two studies that explored the top-down, bottom-up, and reciprocal effects between global and contextual motivation.

Contextual measures of motivation have been developed for several life domains, including education (Vallerand et al. 1989, 1992), interpersonal relationships (Blais et al. 1990), sports (Vallerand and Brière 1997), and work (Blais et al. 1993)—the scale used in this study. Indices of reliability and validity have been found to be acceptable for all the scales (see Vallerand 1997).

Guay et al. (2000) developed and tested the Situational Motivation Scale (SIMS), which measures IM (without distinguishing types of IM), identified and external types of EM, and AM. They measured only four motivational types to keep the scale as brief as possible to capture situational motivation in a wide array of potential contexts. The SIMS factor structure and reliability has been confirmed as a measure of situational motivation to improve sport performance (Blanchard et al. 2007) and as a measure of motivation to drop out of high school (Vallerand et al. 1997).

Early theorizing in the area of SDT proposed an additional type of regulation—integrated regulation. However, early empirical scale development found measuring integrated regulation challenging because it failed to discriminate from identified regulation and from intrinsic motivation. Since then, integrated regulation has, for the most part, been omitted from the model, including the aforementioned scales. Furthermore, Ryan and Connell (1989) specifically tested the value of including integrated regulation in two contextual motivation scales and found that the scales displayed better psychometric properties and parsimony when integrated regulation was not included. Thus, we followed this practice in our measures.

The four motivation variables—global motivation, contextual motivation regarding technology, contextual motivation regarding work, and situational motivation regarding participation in implementation—all were measured by composite scales representing self-determined motivation indices. A self-determined motivation index consists of a summation of specifically weighted scores and is used to integrate the information from the different motivational continuum subscales (e.g., AM, introjected) under one score (Grolnick and Ryan 1987; Vallerand and Bissonnette 1992). Research using this assessment strategy has confirmed that in domains such as education (Vallerand et al. 1997), sports (Vallerand and Brière 1997), and health care (Williams et al. 1998), the types of regulation adhere to a quasi-simplex pattern, which means that each subscale correlates most positively with the subscales closest to it and less positively or more negatively with subscales farther from it. This pattern is consistent with the SDT assertion of an underlying control-to-autonomy continuum (see Fig. 1), in which AM is most distant from IM. Accordingly, the subscales can be used individually to predict outcomes, or they can be combined algebraically to form a single motivation index (Grolnick and Ryan 1987). This index proves most useful when a researcher needs to reduce the number of indicators in a test employing structural equation modeling (Vallerand 1997). Support for the validity and reliability of this type of motivation index has been obtained in several studies (e.g., Blais et al. 1990; Grolnick and Ryan 1987; Guay et al. 2003; Vallerand and Bissonnette 1992; Vallerand et al. 1997).

In line with the SDT literature's accepted procedure for calculating these indices, we assigned weights to the items according to their respective placement on the self-determination continuum (Fortier et al. 1995; Grolnick and Ryan 1987; Guay et al. 2003). We assigned positive weights to the measures of IM and identified EM because they are considered self-determined forms of motivation, with the heaviest weights (i.e., +2) assigned to the most strongly self-determined forms. We assigned negative weights to external

and introjected EM and to AM because they are considered less self-determined forms of motivation, with the heaviest weights (i.e., -2) assigned to the least self-determined forms of motivation. Details of the weighting schema and the calculations for constructing the indices appear in Appendix B (see also Figs. 1 and 2).

Following data collection, we subjected the measures to CFA to assess their reliability and validity (Anderson and Gerbing 1988; Churchill 1979; Fornell and Larcker 1981). All analyses were conducted in maximum likelihood structural equation modeling, using AMOS 16.0. Both the sample size and resulting power were sufficient to test the CFA and the structural models, given the number of degrees of freedom in the model (MacCallum et al. 1996). The fit of the CFA model is acceptable: $\chi_{(524)}^2=982.84$ ($p=0.00$), comparative fit index (CFI)=0.94, Tucker–Lewis index (TLI)=0.93, incremental fit index (IFI)=0.94, and root mean square error of approximation (RMSEA)=0.05. All the factor loadings were positive and significant, providing evidence of convergent validity. Reliabilities were also excellent, with all Fornell and Larcker's α s at 0.83 or above, and the average variance extracted (Fornell and Larcker 1981) was well above the cutoff of 0.50 for all scales. In addition, when comparing the average variance extracted with the squared multiple correlations between constructs, which provides a rigorous test of discriminant validity, all constructs differentiated from one another. Table 1 shows the descriptive statistics and correlations for all the constructs.

One of the strengths of this study is that we conducted it in a field setting with real employees involved in an actual service innovation implementation. However, an unavoidable tradeoff in exchange for the external validity provided by a real-world environment is that the setting also results in some restrictions in what the research can capture. Specifically, a limitation of this study is that both the exogenous and the endogenous variables are measured as employee self-reports. An alternative would have been to collect data from customers matched to service personnel regarding the customers' perceptions of employee behavior; however, customers could not be tracked in such a way because of the manufacturer's restriction that data could be collected only at the end of its pilot program implementation. During the pilot implementation, the manufacturer itself tracked only collective (dealership-level) customer adoption of the innovation, not individual customer-level adoption. Another option would have been to measure employee behavioral outcomes from an alternative source, such as a supervisor. Although one focal behavior (i.e., verbally recommending the service innovation to customers in person at the dealership) could have been observed by the dealership management, the manufacturer made the

Table 1 Descriptive statistics and correlations

	Mean	St. Dev.	1.*	2.	3.	4.	5.	6.	7.	8.	9.
1. Task Autonomy	3.87	1.65	0.833/0.647								
2. Role Clarity	3.41	1.92	0.557	0.924/0.807							
3. Employee Beliefs Re: Innovation	5.15	1.59	0.550	0.318	0.944/0.768						
4. Employee Feelings Re: Innovation	4.55	1.26	0.415	0.300	0.622	0.930/0.730					
5. Participation in Implementation: Recommending Behavior	3.91	1.69	0.623	0.550	0.613	0.531	0.836/0.623				
6. Global Motivation	-0.0018	3.93	0.112	0.021	0.174	0.105	0.080	0.862/0.616			
7. Contextual Motivation Re: Technology	0.0022	4.53	0.296	0.081	0.277	0.249	0.221	0.552	0.909/0.719		
8. Contextual Motivation Re: Work	-0.0003	4.25	0.209	0.132	0.260	0.227	0.216	0.487	0.566	0.855/0.666	
9. Situational Motivation Re: Participating in Implementation	-0.0049	4.79	0.495	0.352	0.569	0.480	0.549	0.222	0.406	0.390	0.886/0.670

*diagonal = Cronbach's alpha/Formell and Larcker's average variance extracted (p_{vc})
 subdiagonal = Inter-construct correlations

decision not to undertake any such tracking. The manufacturer also did not monitor other employee behaviors related to the implementation (e.g., recommending by telephone or in writing, responding to customer questions or concerns about the service innovation). Therefore, our only option was to rely on employee perceptions and self-reports.

However, we address this limitation in part by determining post hoc whether common method variance due to the use of a single source had a significant impact on the results. To do so, we instituted two tests of common method bias. First, we examined the fit of a model in which all indicators loaded on one factor. The logic underlying the “single-factor procedure” (Podsakoff and Organ 1986) is that if method variance (e.g., that from single-source bias) is largely responsible for the covariation among the measures, a CFA should indicate that a single (method) factor fits the data. A one-factor model did not fit the data, reducing concerns about common method bias ($\chi_{(560)}^2=5073.45, p<0.01$; CFI=0.44; TLI=0.37; IFI=0.45; and RMSEA=0.16). In addition, we controlled for the portion of the variance in the indicators that is attributable to obtaining the measures from the same source by re-estimating the structural model with the addition of a directly measured “single-source” first-order factor added to the indicators of all the latent variables in the model (see Podsakoff et al. 2003). The results of this test provide additional, stronger support for our assertion that the overall pattern of significant relationships and the magnitude of the standardized estimates in the structural model were not affected by common method variance (i.e., all the paths that were significant when common method variance was not controlled remained significant even when common method variance was controlled).

Structural equation modeling and results

The overall structural model fit the data well: $\chi_{(546)}^2=1189.96 (p<0.01)$, CFI=0.92, TLI=0.91, IFI=0.92, and RMSEA=0.06. Exogenous constructs were allowed to correlate, in line with standard procedure. All the structural parameters were significant at $p<0.01$. The structural model estimates appear in Table 2.

Hypotheses 1a and 1b stated that global motivation would be positively related to employee contextual motivation regarding both technology and work. These hypotheses were supported. Hypotheses 2a and 2b, which stated that contextual motivation for both technology and work would be positively related to situational motivation to participate in the innovation implementation, were also supported. Taken together, these hypotheses support the perspective of a hierarchy of self-determined motivation.

Hypothesis 3a proposed that employees' feelings toward the innovation would mediate the effect of task autonomy on

Table 2 Results: Structural model estimates

Hypothesis	Hypothesized Path	Standardized Path Coefficient
H1a	Global Motivation→Contextual Motivation Re: Technology	0.649**
H1b	Global Motivation→Contextual Motivation Re: Work	0.603**
H2a	Contextual Motivation Re: Technology→Situational Motivation Re: Participation in Implementation	0.217**
H2b	Contextual Motivation Re: Work→Situational Motivation Re: Participation in Implementation	0.172*
H3a	Task Autonomy→Employee Feelings Re: Innovation	0.569**
	Employee Feelings→Situational Motivation Re: Participation in Implementation	0.170*
H3b	Task Autonomy→Employee Beliefs Re: Innovation	0.648**
	Employee Beliefs→Situational Motivation Re: Participation in Implementation	0.403**
H4	Role Clarity→Situational Motivation Re: Participation in Implementation	0.151*
H5	Role Clarity→Participation in Implementation: Recommending Behavior	0.441**
H6	Situational Motivation Re: Participation in Implementation→Participation in Implementation: Recommending Behavior	0.458**
	R ² for Employee Beliefs Re: Innovation	0.420
	R ² for Employee Feelings Re: Innovation	0.324
	R ² for Situational Motivation Re: Participation in Implementation	0.467
	R ² for Contextual Motivation Re: Technology	0.421
	R ² for Contextual Motivation Re: Work	0.364
	R ² for Participation in Implementation: Recommending Behavior	0.546

** significant at $p < 0.001$

* significant at $p < 0.01$

situational motivation to participate in innovation implementation. Hypothesis 3b investigated the same mediating relationship for employees' beliefs about the innovation. Both mediating effects were supported by the data. Task autonomy had a significant effect on both employees' feelings toward and beliefs about the service innovation. In turn, feelings and beliefs had significant effects on situational motivation to participate in the service innovation implementation. In addition, the effect of task autonomy on situational motivation was fully mediated through employees' feelings and beliefs; the addition of a direct path from task autonomy to situational motivation was statistically insignificant ($p = 0.08$).

Finally, we examined the relationship between role clarity and employee participation in implementation, operationalized as employee recommending behavior, and whether that relationship was partially or fully mediated by situational motivation regarding participation in the innovation implementation (Hypotheses 4–6). Role clarity had a significant direct effect on employee recommending behavior, but its effect on behavior was also partially mediated by situational motivation. The indirect effect of role clarity on participation is 0.314 when the effect of autonomy on participation is taken into account, an amount that is larger than its direct effect of 0.236. In addition, autonomy had an indirect effect of 0.138 on participation. The partial mediation was confirmed through the use of Baron and Kenny's (1986) method of a series of

regression equations. First, situational motivation was regressed on role clarity, which was significant at $p < 0.01$, with an unstandardized beta of 0.904. Second, behavior was regressed on role clarity, which was significant at $p < 0.01$, with an unstandardized beta of 0.482. Finally, recommending behavior was regressed on both role clarity and situational motivation, which were both significant at $p < 0.01$, with unstandardized betas of 0.361 and 0.130, respectively. That all the conditions held in the predicted direction, coupled with the finding that the effect of role clarity on behavior was less in the third equation than in the second equation, establishes mediation. The Sobel (1982) significance test for the indirect effect of the independent variable on the dependent variable through the mediator also was significant, at $p < 0.01$.

Discussion

This study contributes to theory and practice related to marketing strategy implementation, an important topic that has received relatively little attention in the marketing literature (Noble and Mokwa 1999). It is well known that strategies of all types, including marketing and customer strategies, frequently fail because of poor execution. Preventing such failures through stronger theoretical and

practical knowledge of why they occur is important for both managers and researchers. In the case of customer-focused service strategies, it is often frontline employees who are charged with implementing significant strategic changes in real time for customers. Understanding these employees' complex motivations related to strategy implementation and the factors that influence their motivations are the primary contributions of this study.

To this end, we developed a theoretical framework for understanding the role of employee motivation to participate in a service innovation implementation, and then we tested our framework in a real-world business context. As Fig. 2 and Table 2 summarize, our results show that motivation at different levels has significant direct and indirect effects on frontline employees' strategy implementation behaviors. We also measured key factors within managerial control to gain an understanding of some specific drivers of motivation at the lowest level in the theoretical hierarchy. By addressing the impact of frontline service employees' motivation to participate in service innovation implementation, we contribute to the literature on marketing strategy implementation and to marketers' understanding of employee motivation. The study contributes to marketing and motivation theory and also suggests implications for managerial practice.

Theoretical contributions

Conceptually and empirically, this study contributes to the literature by placing frontline employees and their motivations and behaviors squarely within the understanding of marketing strategy implementation. To date, knowledge of marketing strategy implementation rests primarily on organizational and management-level variables rather than on frontline employees and a micro-level understanding of their roles. With few exceptions, the field has largely neglected these important micro aspects of strategy implementation successes and failures. Through our research, we highlight frontline employee motivations and behaviors and hope to encourage future research that will build from this fundamental contribution.

Theoretically, we contribute to the marketing literature on motivation by introducing a hierarchical conceptualization of motivation that has gained significant traction in other fields (e.g., Amabile 1997; Gagné and Deci 2005; Vallerand 1997; Vallerand et al. 1997) but has not been applied in marketing contexts. By applying this theory in a real-life marketing strategy implementation, we demonstrate the value of considering multiple, interconnected levels of motivation to gain a better understanding of individual employee behaviors in a work context. Traditionally, the marketing literature has focused on a global personality-level motivation construct. The richer conceptualization used in our study includes global motivation, as well as contextual-level (i.e., motiva-

tions toward work and technology) and situational-level (i.e., motivation to recommend a new technology service innovation) motivation, adding significantly to the understanding of how complex levels of motivation affect employee behavior. By establishing these distinct and separate levels of motivation, we add to the theoretical understanding of motivation in the marketing literature and in practice.

We also introduce into the marketing literature a richer conceptualization of motivation itself, whether at the global, contextual, or situational level. Drawing from the work of Deci and Ryan (2002) and Vallerand (1995, 1997), we measure types of motivation at each of these levels utilizing the conceptualization of a continuum ranging from amotivation on the one end to intrinsic motivation on the other end. This conceptualization recognizes that motivation is more than the simple intrinsic–extrinsic motivation dichotomy typically used in marketing and consumer research and also encompasses amotivation, the lack of any motivation directed at a particular behavior. Amotivation has not been studied in marketing and yet it could have important implications in the context of sales and service employees' work behaviors as well as consumer behavior.

We also contribute to the source of the original theory by testing the full motivation model in one study and in a real context that has not been studied previously. We confirm Vallerand's (1995, 1997) conceptualization that a global, personality-level motivation exists at the top of the hierarchy, which reflects enduring individual differences. In turn, global motivation influences the next level of motivation—contextual motivation, or in this case motivations toward work and technology. We also confirmed that these contextual motivations are related to the most specific level of motivation (and lowest on the hierarchy)—situational motivation, or in this case participation in the implementation of a strategic service innovation. In accomplishing this empirical analysis in a field setting, we help validate the constructs' theoretical conceptualizations and operationalizations and establish a nomological network of drivers and outcomes with both managerial and theoretical relevance in marketing.

At the situational level of motivation, this study also demonstrates that employee task autonomy is significantly and positively related to motivation to participate in service innovation implementation; moreover, this study is the first to empirically demonstrate the process by which this relationship works, in that the relationship is fully mediated by employee feelings toward and beliefs about the innovation. Finally, the study confirmed a significant, positive relationship between employee role clarity and employee recommending behavior, which was partially mediated by situational motivation to participate in implementation.

Managerial implications

Marketing managers are concerned with the dual objectives of innovation and execution. For customer-focused service strategies, this often means that managers are concerned with getting frontline employees to embrace, execute, promote, and even co-create innovations with their customers (Vargo and Lusch 2004). Our study focuses on frontline employees and provides managers with a deeper understanding for involving and motivating them to engage in strategy implementation.

The study shows that global motivation, the highest level in the motivation hierarchy, has a significant influence on employee motivations toward work and technology at the contextual level. However, global motivation is generally believed to be a personality-level construct that is difficult for managers to influence. Thus, if managers want to control this type of motivation, their most successful approach would be to select and hire for it. Particularly in service industries, in which the “people are the product” and represent the face of the organization or the brand, the most successful firms identify and compete for “talent market share” (Berry and Parasuraman 1991, p. 153). According to our research, as part of their recruiting processes, firms should use more sophisticated measures to identify candidates with the right qualities of global motivation, and possibly contextual motivation as well, as part of their selection criteria.

At the situational level of motivation, this study suggests that there are things managers can control more directly, which in turn will result in greater motivation and positive implementation behaviors. For example, managers can influence situational-level motivation by empowering employees to choose to act (e.g., task autonomy) and by providing them with clear understanding of how the new innovative service works (e.g., role clarity). In the case of task autonomy, the results show that employees’ belief that they could choose to recommend the innovation rather than being forced to do so resulted in stronger positive feelings toward and beliefs about the innovation and, in turn, a stronger motivation to recommend it to customers. Role clarity not only had a significant relationship to situational motivation to participate in implementation but also had a significant direct and positive relationship to employee recommending behaviors. The findings support practical suggestions for strategy implementation related to employee empowerment and education.

One practical suggestion is what we call an “employee rollout program” that would occur in advance of customer rollout of new service innovations. Frequently, employees are the last to learn about new customer-facing services. Our research suggests that managers should provide training and internal promotion so that employees will

clearly understand their tasks and thus engage more fully with the innovation before its introduction to customers. Employees who have greater role clarity about the innovation are more motivated to recommend it to customers. Our research also suggests that if these types of rollout programs help improve employee feelings toward and beliefs about the innovation, they will in turn lead to greater employee motivation to deliver or recommend the innovation.

The results also support the value of providing employees choice and independence regarding implementation of new strategy innovations so that they believe they have autonomy, which in turn leads to greater motivation to participate. Training and incentives that give employees the sense that they have choices in innovation implementation are likely to result in more positive feelings, beliefs, and behaviors related to the innovation.

Finally, as noted in our theory implications, the complex model of motivation tested herein is not limited in its potential application to employee motivation alone. In contexts in which customers and employees co-create or “co-implement” service innovations and in which these innovations require significant behavior change for employees *and* customers, the model can provide practical guidance for engaging both employees and customers in successful implementation behaviors.

Limitations and future research

As with any study, this study has limitations. First, we conducted it in a single context and in a single industry. Additional testing across industries and contexts, with other types of contextual and situational motivations, would help extend and validate the hierarchical framework and its antecedents. Likewise, the contextual motivation measures and the situational-level measures are limited in their generalizability because of the idiosyncratic nature of measurement for different life domains (Pelletier et al. 1995; Vallerand et al. 1992). The measures for task autonomy, role clarity, feelings, and beliefs do not suffer from the same limitation, given that they are drawn directly from extant studies in many contexts that have used these measures to provide a “target” object for respondents to evaluate.

Second, as with the majority of survey research, this study is cross-sectional, so direction of effects can be only be suggested and not proved. As mentioned previously, the collection of all variables from a single source is a limitation, albeit one unavoidably dictated by the restrictions of the very field setting that gives the study its realism; however, post hoc analysis found no significant bias attributable to the use of a single source, providing some support for the argument that the

findings are a result of the theoretical relationships rather than a methodological artifact.

The application of motivation theory to the important problem of employee participation in service innovation implementation opens up fertile ground for future research questions that have substantial potential for both theoretical and managerial contributions. The left side of the model, which is focused on the antecedents of motivation, is wide open for additional work investigating factors that would influence employee motivation directly or through autonomy or role clarity (e.g., the role of training, tactical support for the initiative, its fit with the corporate vision, organizational buy-in, senior management support, co-worker perceptions and support). Within the hierarchy of motivation, researchers could investigate the relative influence of different types of contextual motivations on situational motivation to participate in innovation implementation. Another fruitful avenue would be to investigate the impact of amotivation specifically in service contexts. Employees who demonstrate amotivation could represent a major problem for a service firm. Therefore, research questions could investigate issues such as how to identify amotivation, its consequences for the firm, and whether firms can effectively counteract or alter it. Another fruitful area would be to examine this model in the context of customer motivation, and potentially customer and employee motivation simultaneously, within service co-creation contexts.

In conclusion, firms must both innovate and successfully implement innovations to grow and stay competitive. Academic research and practitioner experience has shown that firms are not as successful at executing their innovative ideas as they would like or need to be. However, the research literature on the execution of marketing strategy innovation is sparse. Given the sheer bulk of the services industry worldwide and the importance of frontline employees to the success of services firms, employees are the critical lynchpin for successful service innovation implementation.

Appendix A

Measurement scales

Constructs	Scale Items	Item Loadings*
Employee Task Autonomy		
	<i>(1 to 7, Strongly Disagree to Strongly Agree)</i>	
	“I recommend [the service innovation] to customers because I choose to.”	0.823
	“Recommending [the service innovation] really matches my choices and interests”	0.905
	“I feel that I can really do what I want in recommending [the service innovation].”	0.645

Employee Role Clarity

(1 to 7, Strongly Disagree to Strongly Agree)

“I am sure how to instruct customers how to use [the service innovation].”	0.900
“The steps in the process of how to recommend [the service innovation] to customers are clear to me.”	0.952
“I believe the directions on how to instruct customers how to use [the service innovation] are clear.”	0.837

Employee Beliefs about Innovation

(1 to 7, Strongly Disagree to Strongly Agree) “With respect to [the service innovation], I think it ...

is a valuable service for customers.”	0.885
is convenient for customers.”	0.783
is a valuable service for this dealership.”	0.933
improves how well we do things at this dealership.”	0.883
saves this dealership time.”	0.884

Employee Feelings toward Innovation

(1 to 7, “For each pair of words, circle the number that best describes how you feel about [the service innovation]”)

Dissatisfied/Satisfied	0.841
Unhappy/Happy	0.890
Depressed/Excited	0.832
Displeased/Pleased	0.927
Anxious/Calm	0.634
Disgusted/Contented	0.813

Employee Participation in Implementation: Recommending Behavior

(1 to 7, Strongly Disagree to Strongly Agree)

“I recommend [the service innovation] to this dealership’s customers.”	0.849
“I intend to recommend [the service innovation] to this dealership’s customers in the future.”	0.742
“I say positive things about [the service innovation] to my friends and family.”	0.767

Global Motivation

(1 to 7, Strongly Disagree to Strongly Agree) “In general (at home, work, anytime) I do things...”

Global Index #1 0.673

“In order to feel good.” (Intrinsic-Stimulation)
“Because I enjoy making interesting discoveries.” (Intrinsic-Knowledge)
“Because of the enjoyment I feel as I become more and more skilled.” (Intrinsic-Accomplishment)
“In order to become the person I aim to be.” (Extrinsic-Identified)
“Because I would beat myself up for not doing them.” (Extrinsic-Introjected)
“Because I don’t want to disappoint certain people.” (Extrinsic-External)
“Even though I do not see the benefit in what I might be doing.” (Amotivation)

Global Index #2 0.764

“Because of the sense of well-being I feel while I am doing them.” (Intrinsic-Stimulation)
“For the enjoyment of acquiring new knowledge.” (Intrinsic-Knowledge)
“For the enjoyment I feel mastering what I am doing.” (Intrinsic-Accomplishment)

- "Because I choose them as means to attain my objectives." (Extrinsic-Identified)
- "Because otherwise I would feel guilty for not doing them." (Extrinsic-Introjected)
- "Because I want to be viewed more positively by certain people." (Extrinsic-External)
- "Although it does not make a difference whether I do them or not." (Amotivation)
- Global Index #3** 0.822
- "For the enjoyable sensations I feel while I am doing them." (Intrinsic-Stimulation)
- "For the enjoyment of learning new, interesting things." (Intrinsic-Knowledge)
- "Because of the satisfaction I feel in trying to excel in what I do." (Intrinsic-Accomplishment)
- "Because I choose to do them in order to attain what I desire." (Extrinsic-Identified)
- "Because I force myself to do them." (Extrinsic-Introjected)
- "In order to show others what I am capable of doing." (Extrinsic-External)
- "Even though I do not have a good reason for doing them." (Amotivation)
- Global Index #4** 0.847
- "For the enjoyable feelings I experience." (Intrinsic-Stimulation)
- "For the enjoyment of learning different, interesting facts." (Intrinsic-Knowledge)
- "Because of the enjoyment I feel while outdoing myself." (Intrinsic-Accomplishment)
- "Because I choose to invest myself in what is important to me." (Extrinsic-Identified)
- "Because I would feel bad if I did not do them." (Extrinsic-Introjected)
- "In order to attain prestige." (Extrinsic-External)
- "Even though I believe they are not worth the trouble." (Amotivation)
- Contextual Motivation Regarding Technology**
(1 to 7, Strongly Disagree to Strongly Agree)
"What inspires you to use new technology products and services?"
- Contextual-Technology Index #1** 0.784
- "The enjoyment I feel in having exciting experiences by using a new technology." (Intrinsic-Stimulation)
- "The enjoyment it gives me to know more about the technology that I use." (Intrinsic-Knowledge)
- "I feel a lot of personal enjoyment while mastering certain difficult technological activities." (Intrinsic-Accomplishment)
- "I think that using new technology will help me better prepare for the career I've chosen." (Extrinsic-Identified)
- "It is absolutely necessary to use technology if one wants to be in mental shape." (Extrinsic-Introjected)
- "It allows me to be well regarded by people that I know." (Extrinsic-External)
- "I once had good reasons for using new technology, but now I'm asking myself if I should continue to do so." (Amotivation)
- Contextual-Technology Index #2** 0.859
- "The excitement I feel when I am really involved in using new technology." (Intrinsic-Stimulation)
- "I experience enjoyment and satisfaction while learning to use new technology." (Intrinsic-Knowledge)
- "The enjoyment I feel while using technology to improve some of my weak points." (Intrinsic-Accomplishment)
- "It is one of the best ways I have chosen to develop other aspects of myself." (Extrinsic-Identified)
- "I feel important when I succeed in using new technology." (Extrinsic-Introjected)
- "The prestige of being a user of new technology." (Extrinsic-External)
- "I don't know anymore; I feel I am incapable of being successful using new technology." (Amotivation)
- Contextual-Technology Index #3** 0.874
- "The intense emotions I feel using a new technology that I like." (Intrinsic-Stimulation)
- "The enjoyment that I feel while learning new technology techniques that I've never tried before." (Intrinsic-Knowledge)
- "The enjoyment I experience while I am perfecting my new technological abilities." (Intrinsic-Accomplishment)
- "It is a good way to learn lots of things that could be useful to me in other areas of my life." (Extrinsic-Identified)
- "I would feel bad if I was not taking time to use new technology." (Extrinsic-Introjected)
- "People around me think it is important to be in mental shape." (Extrinsic-External)
- "Honestly, I don't know I really feel that I am wasting my time using new technology." (Amotivation)
- Contextual-Technology Index #4** 0.872
- "I like the feeling of being totally immersed in a new technology activity." (Intrinsic-Stimulation)
- "The enjoyment I get in knowing how to use a new technology." (Intrinsic-Knowledge)
- "The enjoyment that I feel while executing certain difficult new technology techniques." (Intrinsic-Accomplishment)
- "I feel that working with new technology will make me more valuable employee." (Extrinsic-Identified)
- "To show myself that I am a technology savvy person." (Extrinsic-Introjected)
- "To show others how good I am at using new technology." (Extrinsic-External)
- "I don't know; I can't seem to achieve the goals that I set for myself in using new technology." (Amotivation)
- Contextual Motivation Regarding Work**
(1 to 7, Strongly Disagree to Strongly Agree) *"Why are you doing this specific job at your dealership?"*
- Contextual-Work Index #1** 0.859
- "The sense of achievement I experience while doing my job in a personal and unique way." (Intrinsic)
- "I chose this job because it allows me to attain some important goals, while at the same time allowing me to respect other aspects of my life." (Extrinsic-Identified)
- "I personally feel that I really ought to be very good at this job and I would be disappointed otherwise." (Extrinsic-Introjected)

"It allows me to make money." (Extrinsic-External)	
"I don't know; I have the impression that I don't have what it takes to do this work well." (Amotivation)	
Contextual-Work Index #2	0.832
"Various aspects of this job stimulate my curiosity to learn more." (Intrinsic)	
"This is the type of work I prefer in order to pursue my career." (Extrinsic-Identified)	
"I really want to be successful in this job and I would be ashamed otherwise." (Extrinsic-Introjected)	
"For the paycheck." (Extrinsic-External)	
"I don't know; I just cannot manage to do the important tasks of the work well." (Amotivation)	
Contextual-Work Index #3	0.754
"I frequently learn interesting things doing this job." (Intrinsic)	
"It's the job I chose to work towards fulfilling my career plans." (Extrinsic-Identified)	
"My work is my life and I don't want to fail." (Extrinsic-Introjected)	
"This job provides security." (Extrinsic-External)	
"I don't know; I am lacking important skills needed to accomplish the tasks required for this job." (Amotivation)	
Situational Motivation Regarding Participation in Implementation	
<i>(1 to 7, Strongly Disagree to Strongly Agree)</i>	
<i>"Why would you recommend [the service innovation] to customers?"</i>	
Situational Index #1	0.750
"I think that recommending [the service innovation] is interesting." (Intrinsic)	
"Recommending [the service innovation] is for my own good" (Extrinsic-Identified)	
"I am supposed to recommend [the service innovation]." (Extrinsic-External)	
"There may be good reasons for recommending [the service innovation], but personally I don't see any." (Amotivation)	
Situational Index #2	0.852
"I think that recommending [the service innovation] is enjoyable." (Intrinsic)	
"I think that recommending [the service innovation] is good for me." (Extrinsic-Identified)	
"I feel recommending [the service innovation] is something that I have to do." (Extrinsic-External)	
"I am not sure if recommending [the service innovation] is worth it." (Amotivation)	
Situational Index #3	0.800
"Recommending [the service innovation] is fun." (Intrinsic)	
"Recommending [the service innovation] is my personal decision." (Extrinsic-Identified)	
"I feel that I don't have a choice in recommending [the service innovation]." (Extrinsic-External)	
"I don't know, I don't see what recommending [the service innovation] brings me." (Amotivation)	
Situational Index #4	0.805
"I feel good when recommending [the service innovation]." (Intrinsic)	

"I believe that recommending [the service innovation] is important for me." (Extrinsic-Identified)
"I feel that I have to recommend [the service innovation]." (Extrinsic-External)
"I do recommend [the service innovation], but I am not sure it is a good thing to continue to do." (Amotivation)

*standardized loadings, all significant at $p < 0.01$.

Appendix B

Equations for calculation of motivation indices

Global Motivation

(Guay et al 1999; Guay et al. 2003)

$$2*((GIM - Accomplishment + GIM - Knowledge + GIM - Stimulation)/3) + 1*(GEM - Identified) - 1*(GEM - Introjected) - 2*((GEM - External + GAM)/2)$$

Contextual Motivation Regarding Technology

(adapted for context from Pelletier et al. 1995; Vallerand et al. 1992)

$$2*((TIM - Accomplishment + TIM - Knowledge + TIM - Stimulation)/3) + 1*(TEM - Identified) - 1*(TEM - Introjected) - 2*((TEM - External + TAM)/2)$$

Contextual Motivation Regarding Work

(Blais et al. 1993)

Note: This scale is smaller because it measures only one set of items for intrinsic motivation, rather than distinguishing between that construct's various subdimensions.

$$2*(WIM) + 1*(WEM - Identified) - 1*(WEM - Introjected) - 2*((WEM - External + WAM)/2)$$

Situational Motivation Regarding Participation in Implementation

(adapted for situation from Guay et al. 2003; Guay et al. 2000)

Note: This scale is briefer than the other measures as it is considered a "state measure" designed to capture an individual's motivation when performing the activity (Vallerand 1997). Thus, it measures only one set of items for IM rather than distinguishing between the three IM subdimensions. Also, it does not measure introjected EM.

$$2*(SIM) + 1*(SEM - Identified) - 1*(SEM - External) - 2*(SAM)$$

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