

# Proactive Postsales Service: When and Why Does It Pay Off?

Proactive postsales service (PPS) refers to a supplier taking the initiative to contact a customer to provide service after a sale is complete. It is argued that PPS leads to faster delivery of service to a broader cross-section of customers than customer-initiated postsales service, or reactive postsales service. The authors argue that mental frames of customers and suppliers engaged in PPS are more positive and open than mental frames of those engaged in customer-initiated service. On the basis of nine focus groups with 94 managers in both business-to-business and business-to-consumer settings, the authors propose three main dimensions of PPS: (1) proactive prevention, (2) proactive education, and (3) proactive feedback seeking. They argue that PPS leads not only to favorable customer-level outcomes (e.g., customer satisfaction) but also to favorable supplier-level outcomes (e.g., greater innovativeness, new product success rate). The authors propose that the value of PPS varies depending on the product's life-cycle stage, its transaction extensiveness, and network externality. In addition, the value of PPS varies depending on a customer's usage intensity, openness to experience, and market mavenism. Some key challenges with PPS pertain to implementation issues, such as privacy intrusion, expectation escalation, user identification, and contact routinization. If neglected, these can result in PPS leading to negative rather than positive outcomes. The authors develop guidelines for addressing these challenges and implementing PPS effectively in both business-to-business and business-to-consumer contexts.

**Keywords:** proactive service, proactive feedback seeking, proactive prevention, proactive education, postsales service

My real estate agent called me two months after I purchased the home and asked me if everything was okay. Then she sent me a reminder four months later to file for homestead. (Home buyer)

**P**ostsales service is an important element of a supplier's offering and a basis for competitive differentiation (Morschett 2006; Van Birgelen et al. 2002). For example, suppliers such as IBM, Lexus, and Caterpillar derive great advantage from their reputations for providing high-quality service after a sale is complete (Cohen, Agrawal, and Agrawal 2006). Postsales service (or after-sales service) can take many forms, including providing spare parts, performing ongoing maintenance, and helping customers use products (Kasper and Lemmink 1989). The current research investigates four customer service issues that are of significant importance but have not been examined to date.

First, whereas most suppliers tend to provide postsales service in response to customer requests (Bowman and Narayandas 2001), suppliers can also choose to proactively contact customers to serve them (e.g., the real estate agent initiative in the opening quotation). Thus, a key question of

interest to managers is, What are the implications of a supplier rather than a customer initiating a postsales service interaction? We argue that the locus of postsales service initiation influences the mental frames (see Felstinger, Abel, and Sarat 1981; Larson 1989) of both customers and suppliers engaged in service interactions. In turn, their mental frames affect both the quality of service suppliers extend and customers' satisfaction with the service. Moreover, supplier-initiated postsales service, or proactive postsales service (hereinafter, PPS), results in faster delivery of service to a broader cross-section of a supplier's customers than customer-initiated postsales service, or reactive postsales service (hereinafter, RPS).

Importantly, we argue that in addition to the customer-level outcomes we noted, PPS leads to valuable supplier-level outcomes that have gone unexplored in the extant literature. Specifically, we argue that PPS results in a supplier receiving faster feedback from a more representative cross-section of its customers compared with RPS. In turn, this enhances the supplier's product innovativeness and new product success rate. It is important for suppliers to consider these supplier-level outcomes when developing postsales service strategies and policies.

The second issue investigated in this research pertains to the different ways a supplier can provide PPS (i.e., the dimensionality of the PPS construct). The primary focus of postsales service literature is on "service recovery," or ways suppliers can or should respond when a failure occurs (e.g., Maxham and Netemeyer 2002; Ringberg, Odekerken-Schroder, and Christensen 2007; Smith, Bolton, and Wagner 1999). This is in marked contrast to the concept of PPS—a supplier initiating postsales service to ensure customer satisfaction and to increase supplier innovativeness.

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Recently, a small number of scholars have alluded in passing to ideas related to PPS; however, the ideas are not investigated in depth (e.g., Anderson, Dubinsky, and Mehta 2006; Barker et al. 2005; Berry and Leighton 2004). The current study pulls together this mélange of ideas in the literature and complements them with insights from group interviews with 94 managers to develop a parsimonious but comprehensive conceptualization of the PPS construct. Briefly, the study suggests that there are three key forms or dimensions of PPS in both business-to-business (B2B) and business-to-consumer (B2C) contexts:

1. *Proactive prevention*: a supplier initiating contact with customers to check how its products are performing and taking action to preempt product failures. This dimension captures ideas alluded to by Barker and colleagues (2005), Beverland, Farrelly, and Woodhatch (2004), Bolton, Lemon, and Verhoef (2008), Maxham and Netemeyer (2002), and Tax, Colgate, and Bowen (2006).
2. *Proactive education*: a supplier initiating contact with customers to advise them how to derive more value from their product purchases. This dimension captures related ideas by Grapentine (2006).
3. *Proactive feedback seeking*: a supplier initiating contact with customers to solicit their feedback. This dimension captures ideas alluded to by Berry and Leighton (2004), Best (2005), and Crie (2003).

Third, the current study identifies conditions under which it is either more or less desirable for a supplier to provide PPS. Because PPS reaches a greater number of customers, it may require more resources in the short run than RPS. Therefore, from a supplier's standpoint, it is important to know the conditions under which the additional costs of providing PPS can be justified by the additional value of PPS to customers and/or the supplier. We argue that the value of PPS to customers and suppliers varies with the characteristics of customers and products involved. As such, PPS may be more appropriate for certain customers and products than for others.

For example, heavy users of a product are likely to value proactive prevention (which preempts product failures) to a greater extent because they stand to lose more from product failures. Similarly, a supplier is likely to value feedback (which proactively obtains product-related feedback from customers) to a greater extent during the early stages of a product's life cycle (when the product design has more room for improvement). We describe three customer characteristics (usage intensity, openness to experience, and market mavenism) and three product characteristics (product life cycle, transaction extensiveness, and network externality) and discuss how each affects the usefulness of PPS.

Fourth, the current study develops guidelines for implementing PPS in both B2B and B2C contexts. There is little or no discussion in the literature about the issues suppliers should take into account when implementing PPS. Although PPS can be valuable for customers and suppliers alike, it has a unique set of potential pitfalls. For example, some customers may view PPS as an invasion of their privacy, leading to negative (rather than positive) customer outcomes. Similarly, if a supplier reaches out to customers for feedback but fails to act on the feedback received, it may result in less favorable and even negative customer

reactions than if the supplier does not initiate customer contact at all. As we discuss subsequently, such potential difficulties can be anticipated and averted through a thoughtful implementation plan. Drawing on group interviews with practicing managers, we develop a series of guidelines for implementing PPS effectively.

Next, we describe the method used to address the four issues investigated. In the subsequent section, we compare and contrast the mental frames of suppliers and customers during PPS versus RPS engagements and their implications for the engagement experience quality. We also review the literature on PPS in this section. Following this, we discuss three forms of PPS—proactive prevention, proactive education, and proactive feedback seeking—and their influence on customer-level outcomes, such as satisfaction, and supplier-level outcomes, such as product innovativeness. We then develop propositions on the moderating role of customer and product characteristics. Then, we discuss guidelines for implementing PPS effectively. We conclude with managerial implications and suggestions for further research.

## Research Approach

We employ a combination of two approaches for this research. First, we draw on theories in psychology and social psychology—especially on complaining behavior, feedback seeking, and risk. These provide insights into the mental frame of a supplier and customer during PPS and the cross-section of customers likely to be reached by the supplier. Second, we draw on face-to-face interviews with managers to develop deeper insights into PPS. The purpose of the interviews with practicing managers is to develop a deeper understanding into the concept of PPS, its effects under different conditions, and its implementation in B2B and B2C contexts.

Face-to-face interviews were conducted in group settings with 94 managers from a diverse range of firms. The interviews were conducted in two phases: Phase 1 consisted of 49 managers in five focus groups, and Phase 2 consisted of 45 managers in four focus groups. A summary description of the interviewees' profile appears in Table 1.

The managers interviewed for the study represent a broad cross-section of firms and industries, spanning both B2B and B2C contexts, and include banking, biotechnology, information technology services, materials, shipping, and nonprofit firms. The interviews were conducted in two large U.S. cities; specifically, 58 managers were interviewed in the Southeast, and 36 managers were interviewed in the mid-Atlantic area. Each interview lasted approximately 45 minutes. The interviews were recorded, and interviewees were ensured that their identities would be kept confidential.

In Phase 1, the interviews were structured around the following set of questions: (1) What are the different ways a supplier can initiate customer contact to provide postsales service? (2) What are the consequences of a supplier initiating customer contact to provide postsales service versus customers initiating contact with the supplier to obtain service? and (3) Are there conditions under which it is more

**TABLE 1**  
**Profiles of Managers Participating in Group Interviews**

Characteristic		Number of Participants	
		Phase 1	Phase 2
Industry	Technology (including telecommunications)	18	14
	Health care	3	2
	Information technology (including software)	11	17
	Nonprofit	1	2
	Other	16	10
Job title	Director, vice president, or president	14	13
	Manager (including senior manager)	16	16
	Engineer (including senior engineer)	1	9
	Other	18	7
Function	Marketing/sales/service/strategy	14	11
	Information technology/information systems	13	11
	Accounting/finance	2	2
	Engineering/operations/production	6	12
	Other	14	9
Type of exchange	B2B (primarily)	23	28
	B2C (primarily)	7	4
	Both	19	13
Location (in the United States)	Mid-Atlantic	18	18
	Southeast	31	27

important (or less important) for a supplier to initiate customer contact to provide postsales service? In addition to insights into these questions, the interviews also surfaced several problems that can arise when firms implement PPS and suggested ways to address them. The interviewees were urged to provide actual examples in support of their points when possible.

In Phase 2, a key objective of the interviews was to compare and contrast the concept of PPS and its implementation in B2B versus B2C settings. Accordingly, the interviews were structured around the following questions: (1) Is PPS different in B2B contexts relative to B2C and, if so, in what ways? (2) Is PPS more important in some B2B and B2C contexts? and (3) What are the challenges in implementing postsales service in B2B versus B2C settings? Interviewees were periodically reminded that B2B settings tend to involve multiple people with different roles, such as decision maker, user, and influencer (see Anderson, Dubinsky, and Mehta 2006). The results suggest that the forms (or dimensions) of PPS are similar across B2B and B2C settings; however, the challenges entailed in effective implementation can be different. We discuss these and other findings in the following sections.

### PPS Versus RPS

From the standpoint of a supplier, postsales service is considered proactive when the supplier reaches out to customers and initiates contact with them. In contrast, postsales service is considered reactive when the service provided by a supplier is a reaction to customer requests or

complaints. The proactive nature of PPS has significant implications for the mental frames of customers and suppliers engaged in service encounters and for the number of customers who receive postsales service. We briefly review the literature on RPS and PPS and then contrast the mental frames of customers and suppliers under these alternative approaches.

#### *Literature Review*

Several marketing studies in the complaint management, service recovery, and customer relationship management literature explicitly or implicitly refer to PPS and have suggested investigating it further as an alternative approach to RPS (e.g., Andreassen 2000; Bhandari, Tsarenko, and Polonsky 2007; DeWitt and Brady 2003; Maxham and Netemeyer 2002; Ringberg, Odekerken-Schroder, and Christensen 2007; Tax, Bowen, and Chandrashekar 1998; Yim, Anderson, and Swaminathan 2004). For example, Maxham and Netemeyer (2002, p. 67) call for research on “how customers respond differently when firms proactively identify and successfully fix problems before customers complain.”

The few formal investigations on proactive approach to service (e.g., Cranage and Mattila 2005; De Jong and De Ruyter 2004; Smith, Bolton, and Wagner 1999; Worsfold, Worsfold, and Bradley 2007) have emphasized supplier-initiated recovery after service failures have already occurred. For example, Cranage and Mattila (2005) suggest that informed choice is a preemptive strategy that can mitigate the damaging effects of service failure. Likewise, Smith, Bolton, and Wagner (1999) examine how supplier-

initiated recovery after a service failure can influence perceptions of justice. Failure avoidance, which is a key element of PPS, is not discussed in this literature.

Some studies (e.g., Berry and Leighton 2004; Beverland, Farrelly, and Woodhatch 2007) and books have examined proactivity in a broader context than service recovery. Berry and Leighton (2004) suggest that proactive approaches (e.g., feedback seeking) can help identify service problems. Beverland, Farrelly, and Woodhatch (2007) examine proactivity in the context of agency–client relationships and recommend that firms use strategies such as initiative taking, horizon expansion, strategic reflection, and signaling. Anderson, Dubinsky, and Mehta (2006) propose using proactive approaches, such as informing current customers of upcoming supplier decisions, being responsive in handling warranty claims, and empathizing with customers having product-related problems. Best (2005) urges seeking feedback from lead users to identify sources of dissatisfaction and opportunities for product improvement.

Although these and other articles (which we discuss further in the next section) motivate our study, they do not focus on the bulk of the content of our study—namely, (1) the mental frames of customers and suppliers during RPS versus PPS; (2) supplier-level outcomes of PPS, such as more representative customer feedback and product innovativeness; (3) the moderating role of product- and customer-related characteristics on the value of PPS to customers and suppliers; and (4) issues that can arise during PPS implementation and guidelines for averting them in B2B and B2C settings.

### ***Customers' Mental Frames and Service Reach***

We argue that a supplier that initiates contact with customers to provide postsales service tends to reach them in a more positive frame of mind than a supplier that provides postsales service after a customer requests it. Best and Andreasen (1977) note that the life cycle of customer complaints can be divided into three stages: a customer perceiving a problem, voicing a complaint, and seeking a resolution (see also Conlon and Murray 1996). Felstinger, Abel, and Sarat (1981) label dispute evolution stages as “naming,” “blaming,” and “claiming.” In the supplier–customer context, the third stage represents customer efforts to obtain a resolution from a supplier. Compared with the first two stages, the mental frame of customers in the third stage is arguably more negative; they are likely to view problems as being severe and to be more emotional (see Larson 1989). As such, a supplier that proactively initiates contact with customers tends to reach them earlier in their product experience cycle—often before the blaming or even the naming stage—when their mental frame is more positive. A positive customer disposition is likely to lead to more effective service interactions, resulting in higher customer satisfaction with postsales service.

Furthermore, prior research has suggested that the mere act of a supplier reaching out to customers is likely to lead to a favorable attitude toward the supplier. For example, Morrison and Bies (1991) suggest that feedback solicitors create positive affect for themselves. Similarly, Ashford and Northcraft (1992) indicate that feedback seekers tend to be

rated as being more likable and conscientious. In addition, prior research has suggested that customers are likely to view a supplier contacting them to provide help and solicit feedback as being empathic and reliable (Holbrook and Kulik 2001; Ping 1993). In turn, a positive disposition toward the supplier is likely to enhance the effectiveness of the postsales service provided and lead to greater customer satisfaction with the service.

It is well documented that many customers avoid contacting a supplier, even when their problems are severe (see Gronhaug and Zaltman 1981). They exit their relationships with suppliers without ever reaching the blaming and claiming stages, resulting in those suppliers never finding out about the customers' problems (see Farrell 1983; Hirschman 1970). However, if a supplier initiates postsales service interactions, it can provide postsales service to all customers, including those who are unable or unwilling to contact the supplier with complaints. Thus, PPS helps a supplier reach a broader cross-section of its customers and thus address their grievances; it also helps customers realize greater utility from their product purchases. As such, PPS is likely to lead to a greater proportion of a supplier's customers being satisfied with its postsales service.

### ***Suppliers' Mental Frames and Service Reach***

The mental frame of suppliers engaged in RPS is commonly one of reducing negativity—that is, placating customers and redressing problems. Research in social psychology (e.g., Baumeister 1999; Mussweiler, Gabriel, and Bodenhausen 2000; Roberson et al. 2003) suggests that suppliers in such situations are more likely to discount or distort the unsolicited customer feedback, particularly if it is negative. In contrast, the mental frame of a supplier engaged in PPS is one of increasing positivity—that is, enhancing customers' product experiences. Such a supplier is more likely to listen to customer issues carefully and to address them conscientiously and completely. The supplier is also likely to pay more attention to customer ideas and suggestions and to use them to improve its products and develop new ones.

Furthermore, as we noted previously, a supplier that provides PPS reaches a more representative cross-section of its customers than one that provides service after being contacted by customers. As such, the former supplier is likely to obtain useful information from customers who would not have contacted the supplier on their own. Thus, PPS results in a supplier obtaining richer and more diverse (representative) customer information for improving existing products and developing new ones (see also Prahalad and Ramaswamy 2000). Table 2 highlights the differences between RPS and PPS.

## **Forms of PPS and Customer- and Supplier-Level Outcomes**

The few studies that allude to the forms (or dimensions) of PPS do so in different ways, resulting in a mélange of related ideas in the literature (see Berry and Leighton 2004; Bolton, Lemon, and Verhoeh 2008; De Jong and De Ruyter 2004; DeWitt and Brady 2003; Grapentine 2006). We draw

**TABLE 2**  
**RPS Versus PPS**

	<b>RPS</b>	<b>PPS</b>
Defining characteristics	<ul style="list-style-type: none"> <li>•Supplier reacts to problems, complaints, and information requests by customers.</li> <li>•Supplier interaction is limited to customers who initiate contact with the supplier.</li> </ul>	<ul style="list-style-type: none"> <li>•Supplier proactively reaches out to customers to avert potential problems, offer suggestions for using/consuming products, and seek feedback.</li> <li>•Supplier interaction is with a broader cross-section of customers selected by the supplier and is accelerated (i.e., takes place earlier in the customer experience with product).</li> </ul>
Customer mental frame	<ul style="list-style-type: none"> <li>•Agitated and negative<sup>a</sup></li> <li>•Typically, somewhat closed</li> </ul>	<ul style="list-style-type: none"> <li>•Potential surprise and delight</li> <li>•Potential suspicion about supplier's motives</li> </ul>
Supplier mental frame	<ul style="list-style-type: none"> <li>•Defensive</li> <li>•Corrective</li> </ul>	<ul style="list-style-type: none"> <li>•Open</li> <li>•Collaborative</li> </ul>
Expected outcomes	Customer Level <ul style="list-style-type: none"> <li>•Greater privacy</li> <li>•Greater sense of control</li> <li>•Relief if problem resolved satisfactorily</li> </ul>	Customer Level <ul style="list-style-type: none"> <li>•Lower risk of product breakdown</li> <li>•Better realization of product value</li> <li>•Greater "voice"</li> <li>•Greater bonding with supplier</li> <li>•Greater number of satisfied customers</li> </ul>
	Supplier Level <ul style="list-style-type: none"> <li>•Fewer customer interactions and, thus, lower customer interaction costs</li> </ul>	Supplier Level <ul style="list-style-type: none"> <li>•More representative customer and product knowledge (leading to greater innovativeness)</li> </ul>

<sup>a</sup>Customers' frame of mind does not need to be negative in all instances in which they initiate a contact with a supplier (e.g., when they want to obtain information or clarification). Even in such instances, however, their mental frame is likely to be neutral at best, not positive.

on these ideas as well as group interviews with 94 managers to develop a parsimonious conceptualization of PPS as having three forms—(1) proactive prevention, (2) proactive education, and (3) proactive feedback seeking. Importantly, although parsimonious, the three-dimensional view of PPS captures various ideas related to proactive service alluded to in the literature (see Table 3). The insights and examples provided by managers suggest that the three forms of PPS are relevant to both B2B and B2C settings, albeit with obvious differences in nature and scope. For example, it is often the case that in B2B complex sales, some forms of PPS are written into service contracts (e.g., proactive prevention is frequently an important part of information technology and telecommunications service contracts), suggesting higher use of PPS in these contexts.

We argue that each of the three forms leads to customer-level outcome of satisfaction with postsales service. In addition, we argue that proactive feedback seeking leads to the supplier-level outcome of product innovativeness (see Table 3).

### **Proactive Prevention**

Proactive prevention refers to a supplier proactively initiating efforts to detect problems that may be imminent for a customer and taking actions to avert them. For example, Otis Elevators remotely monitors sensors in its elevators installed on customer premises. The sensors track the "health" of an elevator's parts and signal imminent breakdowns to the postsales service organization, which then

sends out crews to replace the parts even before they break down. If the company were to wait for customers to contact it after the parts actually failed before replacing them, it would represent RPS.

Another form of proactive prevention was described by an interviewee who narrated his experience with American Express:

Amex calls and tells me there is a change in my credit card usage pattern;... they checked if everything was correct with the usage. It was also nice that they did not try to sell me something.

An interviewee serving business customers described proactive prevention as follows:

My company does database and system health monitoring. We have automated processes that let us know if there are problems with a customer's systems. We proactively contact the customer and engage in problem solving (e.g., you will run out of disk space in 3 days; you need to do this...).

Several scholars have noted that supplier activities representing proactive prevention lead to positive outcomes for a customer (e.g., Barker et al. 2005; Bolton, Lemon, and Verhoef 2008; Maxham and Netemeyer 2002; Tax, Colgate, and Bowen 2006). By averting product malfunctions, breakdowns, and inappropriate uses even before they happen, proactive prevention reduces customer risk, leading to greater customer satisfaction with postsales service.

**TABLE 3**  
**Forms of PPS, Defining Characteristics, Expected Outcomes, and Related Literature**

	Forms of PPS			
	Proactive Prevention	Proactive Education	Proactive Feedback Seeking	
Defining characteristics	<p>Proactively ...</p> <ul style="list-style-type: none"> <li>•Monitoring for symptoms of product-related problems through mechanical, electronic, or human means; taking remedial action</li> <li>•Looking for product mishandling and taking corrective action</li> </ul>	<p>Proactively ...</p> <ul style="list-style-type: none"> <li>•Providing product-related information and skills to help customers realize greater value</li> <li>•Informing customers of alternative products that might serve their needs more effectively</li> </ul>	<p>Proactively ...</p> <ul style="list-style-type: none"> <li>•Obtaining diagnostic information on product performance</li> <li>•Soliciting complaints</li> <li>•Asking about customer preferences and current gaps</li> </ul>	
Illustrative examples (from interviews with managers)	<p>B2B</p> <ul style="list-style-type: none"> <li>•Information technology services: “My vendors have a modem-connected system, so they get the health check [on our machines]. They, in turn, update our managers, so we know things will not drop off.”</li> <li>•Nuclear industry: “We use standardized report cards (nuclear reactors)—whoever prepares the card, it has the same format. If we sense a problem at a site, it goes up several levels in our organization.”</li> </ul>	<p>B2C</p> <ul style="list-style-type: none"> <li>•Credit cards: “AmEx calls and tells me there is a change in my credit card usage pattern.”</li> <li>•Auto: “I received an e-mail from my automobile manufacturer saying that there were problems with my car.”</li> </ul>	<p>B2B</p> <ul style="list-style-type: none"> <li>•Industrial gas supply: “We supply gases that have a shelf life—have an expiration date. We now leave SMS messages alerting (customers) to the imminent expiry.”</li> <li>•Information technology consulting: “We’ll call the client and say, ‘Did you know your contract allows for xyz?’ (We’ll also) proactively educate new employees of the customer who may not know that they have a contract with [us].”</li> </ul>	
	<p>B2C</p> <ul style="list-style-type: none"> <li>•Home purchase: “My real estate agent sent me a reminder to file for homestead.”</li> <li>•Courier: “This [company] proactively provides information about product status rather than me call/ask for it.”</li> </ul>	<p>B2B</p> <ul style="list-style-type: none"> <li>•Medical diagnostics: “We have continuous follow-up with customers ... more to maintain a relationship.”</li> <li>•Information technology security: “We do yearly calls to every one of our clients—executive management to executive management. [Invariably,] there are latent dissatisfaction issues. We would never have uncovered these without reaching out.”</li> </ul>	<p>B2C</p> <ul style="list-style-type: none"> <li>•Health care: “Our doctor’s office called to see how the patient was doing. They didn’t need to. It was very nice of them to do so.”</li> <li>•Home painting: “Obtain feedback; then obtain feedback again after problem is fixed (to identify any problem with a completed job).”</li> </ul>	
	Expected outcomes	<p>Customer Level</p> <ul style="list-style-type: none"> <li>•Lower risk, leading to greater satisfaction and use</li> </ul>	<p>Customer Level</p> <ul style="list-style-type: none"> <li>•Enhanced product knowledge, leading to better usage and greater satisfaction</li> </ul>	<p>Customer Level</p> <ul style="list-style-type: none"> <li>•Greater “voice,” leading to greater satisfaction</li> </ul>
		<p>Supplier Level</p> <ul style="list-style-type: none"> <li>•Customer willingness to adopt supplier’s new products</li> </ul>	<p>Supplier Level</p> <ul style="list-style-type: none"> <li>•Customer willingness to adopt supplier’s new products</li> </ul>	<p>Supplier Level</p> <ul style="list-style-type: none"> <li>•Supplier learning about customers’ product usage experience, leading to greater innovativeness</li> </ul>

**TABLE 3**  
**Continued**

	Forms of PPS		
	Proactive Prevention	Proactive Education	Proactive Feedback Seeking
Related literature	<ul style="list-style-type: none"> <li>•Tax, Colgate, and Bowen (2006): Prevention is key to managing customer failures and recommend a three-step framework for preventing failures.</li> <li>•Maxham and Netemeyer (2002): Call for research to explore customer responses to proactive service recoveries initiated by the supplier (i.e., fix problems before customers complain).</li> <li>•Barker and colleagues (2005): Case example of Lucent using preventative maintenance.</li> <li>•Bolton, Lemon, and Verhoef (2008): A high-level service contract could include proactive service (e.g., repairs, preventative maintenance).</li> </ul>	<ul style="list-style-type: none"> <li>•Grapentine (2006): Proactive service is a latent construct and an item for measuring it includes “keeps customers informed about new products and services.”</li> </ul>	<ul style="list-style-type: none"> <li>•Crie (2003): Rather than be passive with complaints, companies should be proactive by gathering information about sources of dissatisfaction.</li> <li>•Berry and Leighton (2004): Proactive methods are necessary to identify service problems. They suggest that senior managers must obtain feedback from customers.</li> </ul>

### **Proactive Education**

Proactive education refers to a supplier initiating effort to educate customers on how they can derive greater utility from its products. For example, a large fertilizer manufacturer takes the initiative to educate its customers as to when, where, and how they should use the fertilizer. If such education were to be provided only after being asked for by a customer, it would represent RPS.

An interviewee selling information technology service contracts to business customers described proactive education as follows:

We'll call the client and say, “Did you know your contract allows for xyz?” [We'll also] proactively educate new employees of the customer who may not even know that they have a contract with our company.

Yet another form of proactive education—in a consumer context—was described by an interviewee in his role as a customer:

I got a call from Nextel saying they've been monitoring my usage and that I'm not really using what I signed up for. [They said] “We can help you change your plan and save you money.” I think proactive service works for contractual products or when a customer may not be using products the right way.

A striking example of educating customers regarding proper disposal of a product came from an interviewee in a B2B gas supply setting:

We supply industrial gases that have a shelf life—have an expiration date. We now leave [short message service] messages alerting [customers] to the imminent expiry.

Although a few studies examine the impact of customer education (e.g., Bell and Eisingerich 2007), none do so in a proactive context. Proactive education enhances the utility customers derive from a supplier's products. In addition, it educates customers as to how a product should (and should not) be consumed, used, or disposed of, thus reducing their risk. As such, it is expected to lead to higher customer satisfaction with the supplier's postsales service.

### **Proactive Feedback Seeking**

Proactive feedback seeking refers to a supplier initiating contact with customers to obtain feedback on their experiences with its products. For example, Westin Hotels contacts its customers after they have completed their stay to obtain feedback about their experiences at the hotel. In contrast, if such feedback were obtained in the form of a complaint filed by a customer, it would represent RPS.

Some of the interviewees noted the value of obtaining customer feedback in group settings. According to an interviewee who serves business customers,

[We] have a steering committee of top clients and seek feedback proactively from them—what issues are you facing? Where can we improve? Also, [we] use this forum to understand which services are being underutilized.

Proactive feedback seeking need not take the form of postsales surveys or interviews but can be based on observational techniques as well. For example, one interviewee noted the importance of observing customers' dining experiences at restaurants and gauging how well they liked their food and wine:

If customers don't seem to be relishing wine, offer a better type of wine at no extra charge.

Prior research has recognized that proactively seeking feedback is important and can potentially affect satisfaction (e.g., Berry and Leighton 2004; Beverland, Farrelly, and Woodhatch 2004). Proactively seeking feedback provides customers the opportunity to express their product experiences to a supplier and thus gives them a "voice" (see Crie 2003; Hirschman 1970). Customers are likely to feel better about a supplier that allows them to have a strong voice. Thus, we expect that proactive feedback seeking increases customers' satisfaction with the supplier's postsales service. As an appreciative customer of a physician noted,

Our doctor's office called to see how [the patient] was doing. They didn't need to. It was very nice of them to do so.

Furthermore, as we discussed previously, proactively seeking feedback enables a supplier to receive information from customers relatively early in their product experience cycle. This is likely to help the supplier identify product-related issues quickly and address them through product improvements and new products (Best 2005, pp. 98–99). The supplier is also likely to learn about the difficulties faced by a diverse set of customers (not just those who take the initiative to contact the supplier) and to develop new products to address these difficulties. Thus, proactive feedback seeking is expected to increase the supplier's product innovativeness.

### Moderating Role of Customers and Products: Theoretical Propositions

Despite the advantages of PPS over RPS, a potential issue is that it entails a greater number of customer interactions than RPS. It is desirable for a supplier to incur costs of these additional interactions provided the supplier or its cus-

tomers derive commensurate or greater value from PPS. The interviews conducted with executives for this research, however, suggest that the value of PPS to customers and a supplier is likely to vary depending on characteristics of the customers and products involved. As such, PPS may be more (or less) appropriate, depending on the customer and product involved.

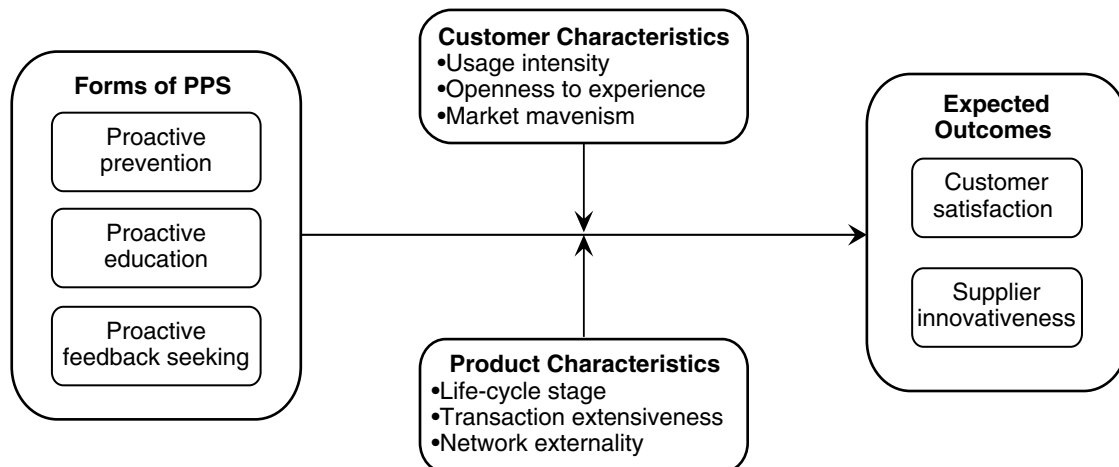
We discuss three customer characteristics (usage intensity, openness to experience, and market mavenism) and three product characteristics (product life cycle, transaction extensiveness, and network externality), and we discuss their likely influence on the desirability of a supplier providing PPS. Although PPS can lead to multiple outcomes at the customer and supplier level, we focus on one outcome at each level for expositional simplicity—(1) customer satisfaction with postsales service and (2) supplier innovativeness. Figure 1 summarizes these relationships.

#### Moderating Role of Customer Characteristics

*Usage intensity.* Usage intensity refers to the extent to which a customer uses or consumes a particular product. There is evidence that customers' attitudes and reactions toward marketer-initiated actions depend on their usage intensity (e.g., Bolton and Lemon 1999; Jewell and Unnava 2004). For example, Jewell and Unnava (2004) note that heavy and light users respond to different messages and have different levels of consistency between brand evaluations and purchase intentions.

Heavy users of a product are prone to incur greater losses in the event of a product malfunction or failure than light users. Therefore, they are likely to value proactive prevention to a greater extent and appreciate it more than light users. In contrast, heavy users tend to have greater knowledge about a product's features, benefits, and problems (e.g., Johnson and Russo 1984; Zaichkowsky 1985). As such, they are likely to value proactive education to a lesser extent than light users (who tend to be less knowledgeable).

**FIGURE 1**  
PPS: Forms, Expected Outcomes, and Moderating Factors



Finally, heavy users are likely to appreciate a supplier initiating contact and seeking product-related feedback because it signals the supplier's acknowledgment of their knowledge and importance. In contrast, light users who have little knowledge to share are likely to appreciate a supplier's request for product feedback to a lesser extent. These arguments suggest the following:

- P<sub>1a</sub>: The higher a customer's usage intensity, the stronger is the positive relationship between proactive prevention and the customer's satisfaction with postsales service.
- P<sub>1b</sub>: The higher a customer's usage intensity, the weaker is the positive relationship between proactive education and the customer's satisfaction with postsales service.
- P<sub>1c</sub>: The higher a customer's usage intensity, the stronger is the positive relationship between proactive feedback seeking and the customer's satisfaction with postsales service.

Heavy users tend to use products in more varied and creative ways than light users (Ram and Jung 1989). As such, they are more knowledgeable about a product's strengths and weaknesses under a variety of usage situations. They are also more likely to have ideas about how the product can be modified to address those weaknesses. Teece (2001) suggests that knowledgeable and experienced people can better integrate and augment information, which places them in a good position to provide useful feedback. Thus, a supplier that initiates contact with heavy users for obtaining feedback (i.e., proactive feedback seeking) is likely to generate a larger number of new product ideas, which in turn are likely to lead to greater supplier innovativeness (see Marinova 2004). Thus:

- P<sub>1d</sub>: The higher the usage intensity of a supplier's customers, the stronger is the positive relationship between proactive feedback seeking and supplier innovativeness.

*Openness to experience.* Openness to experience is a fundamental dispositional difference among people; it refers to "people's willingness to make adjustments to existing attitudes and behaviors once they are exposed to new ideas or situations" (Flynn 2005, p. 817). People with high openness tend to be creative and flexible in their thinking (Digman 1990; Thoresen et al. 2004). They adapt their problem-solving heuristics to changing task and situational demands and are better able to cope with change (Judge et al. 1999; LePine, Colquitt, and Erez 2000). In contrast, people with low openness to experience prefer the conventional, routine, and familiar (Costa and McCrae 1992; McCrae 1996).

People with low openness to experience dislike interruptions to their routines and thus are expected to be averse to events that cause disruptions and uncertainty (see Flynn 2005). Therefore, customers with low openness to experience are likely to appreciate a supplier's acts of proactive prevention directed at minimizing disruptions that may arise because of product failures. In contrast, customers with high openness to experience are more comfortable with uncertainty and are better able to deal with changing conditions by developing their own novel solutions to problems. Proactive prevention is arguably of lesser importance to them than to customers with low openness to experience.

People with relatively high openness to experience are likely to appreciate proactive education to a greater extent for two reasons: First, such people are interested in learning new and potentially better ways of doing things (Flynn 2005; George and Zhou 2001). Second, they are more comfortable obtaining information from others (Wanberg and Kammeyer-Mueller 2000).

Furthermore, people with high openness to experience tend to experiment, which gives them a broader set of experiences (George and Zhou 2001). Therefore, customers with a high openness to experience are likely to have broader experiences and, thus, more ideas for improving a supplier's products. As such, they are likely to be more appreciative of proactive feedback seeking designed to obtain their suggestions, new product concepts, and/or creative uses of a product. Thus:

- P<sub>2a</sub>: The higher a customer's openness to experience, the weaker is the positive relationship between proactive prevention and the customer's satisfaction with postsales service.
- P<sub>2b</sub>: The higher a customer's openness to experience, the stronger is the positive relationship between proactive education and the customer's satisfaction with postsales service.
- P<sub>2c</sub>: The higher a customer's openness to experience, the stronger is the positive relationship between proactive feedback seeking and the customer's satisfaction with postsales service.

As we discussed, people with high openness to experience are likely to be more creative (Feist 1998; Judge et al. 1999; McCrae and Costa 1997). As such, they are likely to have greater insights into new products a supplier might consider developing in the future. Therefore, proactive feedback seeking directed at such customers is likely to help the supplier learn about more ways of improving its products and developing new ones. In turn, this is likely to lead to greater supplier innovativeness. Thus:

- P<sub>2d</sub>: The higher the openness to experience of a supplier's customers, the stronger is the positive relationship between proactive feedback seeking and supplier innovativeness.

*Market mavenism.* People high on market mavenism are those who "have [more] information about many kinds of products, places to shop, and other facets of markets and who initiate discussions with consumers and respond to requests from consumers for market information" (Feick and Price 1987, p. 85). Market mavens have general marketplace knowledge rather than product-specific knowledge (Clark and Goldsmith 2005; Lichtenstein and Burton 1990). Whereas experts build knowledge because of their involvement with a product, people high on market mavenism do so because of their involvement with the marketplace (Feick and Price 1987; Gladwell 2002).

Market mavens actively seek information from a variety of sources (Feick and Price 1987). Product and market information is of value to them because they derive satisfaction from sharing it with other customers and using it to solve other customers' product-related issues (Clark and Goldsmith 2005; Gladwell 2002; Price, Feick, and Guskey 1995). Therefore, they are likely to value proactive educa-

tion and proactive prevention because both provide information about how to use products and how to avert and minimize product failures. Furthermore, people high on mavenism are repositories of information even for products they do not consume and are enthusiastic about sharing their product knowledge with others (Gladwell 2002). They also tend to appreciate a supplier's initiative to obtain their knowledge and ideas (proactive feedback seeking). Thus:

P<sub>3a</sub>: The higher a customer's market mavenism, the stronger is the positive relationship between proactive prevention and the customer's satisfaction with postsales service.

P<sub>3b</sub>: The higher a customer's market mavenism, the stronger is the positive relationship between proactive education and the customer's satisfaction with postsales service.

P<sub>3c</sub>: The higher a customer's market mavenism, the stronger is the positive relationship between proactive feedback seeking and the customer's satisfaction with postsales service.

Finally, there is evidence that mavens are sought out by other customers for help on a broad range of product-related problems and issues (Feick and Price 1987; Higie, Feick, and Price 1987; Slama and Williams 1990). This not only helps other customers but also leads high-mavenism people to become knowledgeable about the problems and issues faced by customers in general. Furthermore, high-mavenism people are knowledgeable about the strengths and weaknesses of competing products in a market. Suppliers that seek feedback from such people are likely to obtain many ideas for improving their products and developing new ones. In turn, this is likely to help the suppliers become more innovative. Thus:

P<sub>3d</sub>: The higher the market mavenism of a supplier's customers, the stronger is the positive relationship between proactive feedback seeking and supplier innovativeness.

### **Moderating Role of Product Characteristics**

*Product life cycle.* Product life cycle refers to the stages in a product category's evolution starting with its launch and terminating with its withdrawal (see Levitt 1965). Broadly speaking, a product life cycle can be characterized by three stages—the early stage, the intermediate stage, and the late stage. The early stage is characterized by two distinctive features: First, a product at this stage is new to the market and typically has some defects or issues that surface after customers begin using it. Second, buyers of the product at this stage (conventionally termed “innovators” and “early adopters”) tend to be willing to assume the risk of purchasing new products despite their lack of a proven track record (see Mahajan, Muller, and Bass 1990; Rogers 1983). As the product life cycle advances through the intermediate and late stage, the quality of the product improves, and it becomes attractive even for the more risk-averse customers.

We expect that the value of proactive prevention to customers is smaller in the early and late stages than in the intermediate stage of a product life cycle. Customers in the early stage (innovators and early adopters) are more venturesome and comfortable dealing with product-related glitches on their own (Moore 1999; Rogers 1983). In the

late stage of a product's life cycle, there are relatively fewer glitches with a product, and this limits the value of proactive prevention to customers. In the intermediate stage, however, the product continues to have glitches, and the new customers at this stage are less comfortable than early-stage customers in dealing with product problems on their own. As such, we expect that proactive prevention is valued most by customers in the intermediate stage of a product's life cycle.

A product in the early stage of its life cycle tends to attract customers who take greater initiative in using the product, are more aware of products in general, and are often a source of new product ideas for suppliers (see Von Hippel 1986). As such, these customers are expected to value proactive education to a lesser extent than customers in the intermediate stage of the product life cycle. New customers in the late stage are also expected to value proactive education to a lesser extent because they have access to more sources (e.g., a larger pool of other customers) for educating themselves about a product.

Although customers are likely to appreciate proactive feedback seeking, those in the early stage are expected to appreciate it to a greater extent (because they are more knowledgeable) and to view themselves as experts or pioneers whose opinions a supplier should value. In contrast, new customers in the late stages are likely to be less interested in providing feedback, especially if it is likely to reveal their relative lack of knowledge. Thus:

P<sub>4a</sub>: The positive effect of proactive prevention on customer satisfaction with postsales service is greater in the intermediate stage of the product life cycle than in the early or late stages.

P<sub>4b</sub>: The positive effect of proactive education on customer satisfaction with postsales service is greater in the intermediate stage of the product life cycle than in the early or late stages.

P<sub>4c</sub>: The positive effect of proactive feedback seeking on customer satisfaction with postsales service is greater in the early stage of the product life cycle than in the intermediate and late stages.

Finally, because customers in the early stage of the product life cycle are more knowledgeable “innovators” and because the product at this stage has more glitches than in the later stages, feedback obtained from these customers is likely to result in more product improvements and innovations. Thus:

P<sub>4d</sub>: The positive effect of proactive feedback seeking on supplier innovativeness is greater in the early stage of the product life cycle than in the intermediate and late stages.

*Transaction extensiveness.* Transaction extensiveness of a product refers to the number of product-related transactions typically expected to take place between a supplier and a customer in a given period. For example, products such as lawn care services, iTunes, and cable television are more transaction extensive than products such as pocket cameras, home appliances, and auto tires. Transaction-extensive products are likely to lead to closer relationships between suppliers and their customers and greater ongoing communications between them (entailing, at a minimum,

suppliers forwarding invoices and customers making payments).

Because customers of a transaction-extensive product have an ongoing relationship with a supplier, they likely view the supplier as having an implicit obligation to help them with their product-related difficulties. In contrast, customers of products with low transaction extensiveness are less likely to expect the supplier to have an implicit obligation to help them. In addition, they are likely to be less knowledgeable about who in the supplier firm to contact in case of a problem and how to go about doing this. Therefore, such customers are likely to appreciate supplier initiatives designed to prevent product problems to a greater extent than customers of products with high transaction extensiveness.

Similarly, customers of low-transaction-extensive products are less likely to expect a supplier to provide them with information about using the products on a regular basis. As such, they are likely to appreciate proactive education to a greater extent than customers of high-transaction-extensive products. Furthermore, customers of low-transaction-extensive products are less likely to expect a supplier to solicit feedback about their product experiences and thus appreciate proactive feedback seeking to a greater extent than customers of high-transaction-extensive products. Thus:

P<sub>5a</sub>: The lower the transaction extensiveness of a product, the stronger is the positive effect of proactive prevention on customer satisfaction with postsales service.

P<sub>5b</sub>: The lower the transaction extensiveness of a product, the stronger is the positive effect of proactive education on customer satisfaction with postsales service.

P<sub>5c</sub>: The lower the transaction extensiveness of a product, the stronger is the positive effect of proactive feedback seeking on customer satisfaction with postsales service.

Finally, because suppliers selling transaction-extensive products are in ongoing contacts with their customers, they are likely to be more aware of their customers' product usage patterns and experiences. For example, utility suppliers have ongoing information about their customers' product usage trends and shifts. Therefore, the incremental benefit of proactively seeking feedback to suppliers of such products is likely to be lower than that to suppliers that sell products with lower transaction extensiveness. In other words, when transaction extensiveness of a product is low, proactive feedback seeking is likely to generate relatively more ideas for product improvement and new products. Thus:

P<sub>5d</sub>: The lower the transaction extensiveness of a product, the stronger is the positive effect of proactive feedback seeking on supplier innovativeness.

*Network externality.* Network externality refers to the increase in the utility of a product to an existing user when a new user adopts the product (see Katz and Shapiro 1985, 1986; Padmanabhan, Rajiv, and Srinivasan 1997). Customers of products such as fax machines, instant messaging systems, and interactive games benefit from the number of additional customers who adopt these products (see Srinivasan, Lilien, and Rangaswamy 2004). There is evidence

that customers of a product with high network externality exchange information with one another to a greater extent than customers of products with low network externality (Shankar and Bayus 2003).

Because of the greater interdependence of customers of products with high network externality, product-related failures encountered by a subset of customers tend to reduce the utility derived by other customers as well. In addition, because of the greater interaction among the product's customers (Shankar and Bayus 2003), the resultant negative word of mouth spreads faster. Indeed, today's technology-mediated environment enables these customer-to-customer interactions to occur at a faster pace than ever before. Therefore, proactive prevention is likely to be of greater importance for ensuring satisfaction among customers when network externality is high. In contrast, the value of proactive education is likely to be lower for customers of products with high network externality because these customers tend to learn from one another to a greater extent. Similarly, the value such customers place on proactive feedback seeking is likely to be relatively lower because they voice their ideas to other customers, something customers of products with low network externality tend to do to a lesser extent. Thus:

P<sub>6a</sub>: The greater the network externality of a product, the stronger is the positive effect of proactive prevention on customer satisfaction with postsales service.

P<sub>6b</sub>: The greater the network externality of a product, the weaker is the positive effect of proactive education on customer satisfaction with postsales service.

P<sub>6c</sub>: The greater the network externality of a product, the weaker is the positive effect of proactive feedback seeking on customer satisfaction with postsales service.

Because customers of high-network-externality products share their experiences with one another to a greater extent (Shankar and Bayus 2003), a supplier can learn about the experiences and needs of not just the customers it contacts but also other customers who communicate with the contacted set. Thus, a given amount of proactive feedback seeking is likely to yield richer new product ideas than the same level of proactive feedback seeking targeted at customers of low-network-externality products. Thus:

P<sub>6d</sub>: The greater the network externality of a product, the stronger is the positive effect of proactive feedback seeking on supplier innovativeness.

## Implementing PPS

In the preceding discussion, we identified the process by which PPS leads to desirable customer- and supplier-level outcomes (customer satisfaction and supplier innovativeness) and the conditions under which these effects are likely to be stronger. Note that if PPS is not implemented correctly, far from leading to positive outcomes, it can lead to negative outcomes, such as customer aggravation and wasted resources. In particular, given that the literature on relationship marketing suggests that each customer should be treated as an individual (i.e., differently), it is important to understand how PPS should be implemented.

Although PPS may be more prevalent in B2B than typical B2C contexts, we discuss several potential problems that can arise from a weak implementation of PPS in both settings. In addition, we draw on the study interviews with managers to develop guidelines for averting the problems identified and note examples of effective implementation (see Table 4). However, because the data for the study are from the United States, generalizing beyond this setting should be approached with caution. We first discuss issues in implementing PPS common to both B2B and B2C contexts and then point to issues specific to each.

### **PPS Implementation Issues in Both B2B and B2C Contexts**

*Motive uncertainty.* A key factor that can affect PPS effectiveness is a customer's causal attribution when a supplier initiates contact. A customer may attribute the contact to the supplier's short-sighted self-interest, such as an excessive enthusiasm for selling add-on goods and services (see DeCarlo 2005), and thus be negatively disposed toward the supplier's PPS effort. Conversely, the customer may attribute the supplier's contact to altruism (i.e., a desire to act in the best interests of the customer) or to enlightened

**TABLE 4**  
**Implementation Issues and Related Guidelines**

Potential Issue	Insights from the Literature	Related Guidelines and Examples
<b>PPS Implementation Issues: In Both B2B and B2C Contexts</b>		
Motive uncertainty	Customers may attribute a supplier's initiation of contact to the supplier's short-sighted self-interest or to altruism (see DeCarlo 2005). Uncertainty about a supplier's motive is likely to hurt PPS outcome.	Train customer-facing employees to provide proactive service, not proactive selling.  Have customer service or research and development rather than sales function contact customers <ul style="list-style-type: none"> <li>•When American Express calls to alert customers on specific transactions, it makes it a point to avoid cross-selling.</li> </ul>
Contact frequency and timing	High contact frequency can infringe on customers' time and convenience; in turn, this can lead to annoyance (see Folger and Konovsky 1989).  Customers need for service changes over the product life-cycle stages.	Do not contact all customers with the same frequency. Check with individual customers (or segments) on their preference <ul style="list-style-type: none"> <li>•Amazon.com customers can select the types of issues for which they would like to be contacted (e.g., newsletters, new product notifications, subscription renewal notices).</li> <li>•Auto repair and service dealers seek feedback after each service visit rather than at a fixed time interval.</li> </ul> Track service needs of analogous products and anticipate when customers will require higher levels of proactive service <ul style="list-style-type: none"> <li>•An information technology services supplier has discovered that customers need high levels of support in the first 30 days after initiation of a service. It plans for this spurt in service requirements by having a sufficient number of trained staff available to provide the support.</li> </ul>
Expectation escalation	Customer expectations increase as service levels rise. This can lead customers to expect high levels of service across locations (see Blau 1964).	Ensure that proactive service can be provided throughout the supplier. <ul style="list-style-type: none"> <li>•Ritz Carlton launched "Mystique," a centralized information technology system in 2005. It makes customer behavior data (e.g., minibar preferences) obtained through observation and feedback visible across all its properties. This ensures proactive service can be provided across all its hotels.</li> </ul> Manage customer expectations by communicating to customers the changes being incorporated in response to their collective feedback.

**TABLE 4**  
**Continued**

Potential Issue	Insights from the Literature	Related Guidelines and Examples
<b>PPS Implementation Issues: Primarily in B2B Contexts</b>		
Identification of users and influencers	Operational counseling (e.g., Tuli, Kohli, and Bharadwaj 2007) along with key account processes (e.g., Homburg, Workman, and Jensen 2002) helps identify key players.	Have customers identify the right people for proactive education and feedback seeking. •Siebel Systems ties incentive compensation of salespeople to satisfaction of users and influencers after a sale is complete. Customer arranges for the administration of customer satisfaction survey with the appropriate people.
Engaging customer's partners	Spherical marketing concept (Svensson 2005) and network literature (e.g., Anderson, Hakansson, and Johanson 1994) suggest engaging with key parties in value chain.	Provide postsales service to customers and their partners when appropriate. •Tier 1 suppliers seek feedback from Tier 2 suppliers (e.g., Johnson Controls) as well as the latter's customers (e.g., automobile manufacturers, such as General Motors).
<b>PPS Implementation Issues: Primarily in B2C Contexts</b>		
Customer privacy	People do a "privacy calculus" when faced with privacy concerns (Culnan and Bies 2003; Laufer and Wolf 1977). They are willing to give up some privacy if benefits of doing so outweigh social and economic risks.	Obtain customer permission before collecting information about them. •Marriott asks guests to supply information themselves using an online form and "opt in" for services  Provide something a customer will value on initiating a contact with a customer. •Google asks users of Google Desktop search for permission to monitor their usage to help them optimize usage (i.e., search) performance.
Contact routinization	Suppliers can make customers indifferent if they merely go through the motions (Barclay, Skarlicki, and Pugh 2005). Furthermore, authenticity, as opposed to surface acting, is important (Hennig-Thurau et al. 2006).	Institute policies and "display rules" that encourage the delivery of empathic service. •Nissan's telephone inquiry after car purchase focuses on how comfortable the purchase and initial consumption experience have been. The emphasis is on ensuring that the customer is happy with the quality of the interaction.

self-interest that takes into consideration customer interest (see DeCarlo 2005). In such instances, the customer's mental frame is likely to be more positive and open to engaging with the supplier, thus making the PPS effort more effective. Managers interviewed for the study emphatically suggested that there should be no ambiguity regarding the motive for the customer contact. As one manager stated, "Keep it proactive customer *service*,... not proactive customer *sales*." Another idea that merits consideration is having a function other than sales contact customers for providing PPS.

*Contact frequency and timing.* Customers who believe that they are being contacted too often are likely to view PPS as both an unfair encroachment on their time and an inconvenience (i.e., procedural injustice). If so, PPS is likely to lead to annoyance (Folger and Konovsky 1989). Several managers noted that suppliers should avoid adopting a blanket policy of contacting customers with a particular frequency; rather, they should contact customers only when they are in a position to provide customer-perceived

value in the course of the postsales contact. For example, customers need higher levels of proactive education ("hand-holding") immediately after purchasing a product rather than later in the product usage cycle. Thus, a key guideline is to anticipate variability in customer need for different types of PPS and to provide PPS accordingly.

*Expectation escalation.* Proactive postsales service can escalate customer expectations of the supplier. Several managers noted that when a supplier proactively educates customers or prevents problems, customers can begin to expect it to do so across all geographies. It is also important for a supplier to continuously augment its capabilities to provide a high level of PPS consistently throughout all geographic regions. In some cases, customers may expect the supplier to do more of their work for them and thus become overly dependent on the supplier. To mitigate this potential difficulty, a supplier should clearly delineate the purpose of PPS and its boundaries to customers. Likewise, social exchange theory suggests that when people provide feedback, they expect their feedback to be acted on (e.g., Blau 1964). How-

ever, it may be impractical for a supplier to implement every suggestion provided by all customers. In such cases, it would be useful for a supplier to “close the loop” with its customers by informing them of the breadth of ideas it heard from its customers collectively and the actions it has taken in response.

### **PPS Implementation Issues: Primarily in B2B Contexts**

It is possible to distinguish B2B markets from B2C markets along several dimensions, such as number of decision makers and role specialization (e.g., Coviello and Brodie 2001; Lilien 1987). Managers interviewed for this study identified two issues as being particularly relevant for PPS implementation in B2B markets: (1) identification of users and influencers and (2) engaging a customer’s partners.

*Identification of multiple users and influencers.* Suppliers interested in selling to business customers must identify the needs and preferences of different members of a buying center (Johnston and Bonoma 1981) and the shifting roles they play over time. After a sale is complete, the number of direct and indirect users escalates well beyond the buying center. Thus, the identification of the right people in a customer firm who should be provided one or another form of PPS can be a major challenge. A possible approach to addressing this challenge is to have customers engage in a type of “operational counseling” (e.g., Tuli, Kohli, and Bharadwaj 2007)—that is, to have customers provide guidance regarding their operations, business processes, and roles played by various individuals.

*Engaging a customer’s partners.* Several managers noted that B2B suppliers are often concerned about providing PPS to their customers’ customers. Svensson (2005) advances the “spherical marketing concept” and suggests that suppliers should consider the needs of all downstream (and upstream) customers (i.e., the entire value chain, not just the immediate customer). In certain cases, a supplier may need to engage with a customer’s partner firms as well (e.g., Anderson, Hakansson, and Johanson 1994).

### **PPS Implementation Issues: Primarily in B2C Contexts**

In general, suppliers in B2C contexts tend to serve a large number of consumers indirectly through channels. This “distance” can give rise to privacy and routinization concerns.

*Customer privacy.* Privacy concerns can arise if consumers are unsure how a supplier has obtained their contact or product usage information or may resent the supplier for intruding into their “personal space.” Although these concerns can arise in business markets as well, they are more prominent in B2C markets because of the indirect relationship between suppliers and consumers (through channel members). Literature on social exchange and self-disclosure suggests that people do a “privacy calculus” when faced with privacy concerns (Culnan and Bies 2003; Laufer and Wolfe 1977). They are willing to give up some of their pri-

vacancy if the benefits of doing so outweigh the social and economic risks. This suggests a simple guideline for PPS implementation: Each supplier-initiated contact should incorporate benefits for a customer that will outweigh his or her potential concern about privacy. In addition, a supplier should consider obtaining permission from customers before initiating PPS, and customers should explicitly be given the opportunity to “opt out” of future PPS efforts.

*Contact routinization.* Several managers noted that the positive outcomes of proactively reaching out to customers can dissipate if the interaction during the contact is perceived as being routinized—that is, mechanical, contrived, or insincere. Although routinized contact can be a problem in B2B too, it appears to occur less frequently in this setting because suppliers and buyers tend to know each other relatively well. Routinized PPS may be viewed as interactional injustice. If so, it can lead to anger on the part of its receivers (see Barclay, Skarlicki, and Pugh 2005). Suppliers can avoid or mitigate these unfavorable effects by instituting formal policies and “display rules” that encourage employees to be empathic and shun surface acting (see Hennig-Thurau et al. 2006; Rupp and Spencer 2006).

## **Conclusion**

This research introduces the concept of PPS, which can be contrasted with the more prevalent approach of providing postsales service in response to customer-initiated contacts (i.e., RPS). It argues that the mental frames of customers and suppliers are more conducive to productive supplier–customer interactions when a contact is initiated by a supplier rather than a customer.

The proactive stance of PPS addresses several limitations inherent in the reactive approach of serving customers who request it: First, not all customers can foresee imminent product problems or ask for service ahead of failure to avoid disruption in their product usage. Second, some customers who encounter product problems may avoid contacting the supplier and exit the relationship completely without having their problem redressed. Third, customers who contact a supplier with a problem are often in an agitated and closed frame of mind, which makes supplier–customer interactions less productive. Fourth, customers who may not be realizing maximum value from goods or services may defect to a competing offering under the potentially false impression that the latter offers superior value. Proactive postsales service helps a supplier overcome each of these limitations of RPS.

Furthermore, PPS results in a supplier providing faster service to a broader cross-section of its customers. This helps the supplier not only better serve a larger customer base (and thus improve overall customer satisfaction levels) but also obtain ideas for new products and product modifications from a more representative (and, thus, more informative) set of customers. As such, PPS can help a supplier become more innovative.

## **Managerial Implications**

From a supplier's standpoint, PPS can lead to direct benefits of new product ideas and indirect benefits through greater customer satisfaction and supplier reputation (of taking care of its customers). At the same time, proactively reaching out to a larger number of customers and serving them takes personnel and monetary investments, at least in the short run. Because these costs are likely to vary in B2B versus B2C settings, a supplier should carefully weigh the direct and indirect benefits it stands to realize from PPS against the costs of providing PPS. Although this decision can be aided by quantitative models that estimate the value of PPS, such models should be complemented with judgment using qualitative assessments.

A supplier can also consider being selective about providing PPS to some customers and not to others. Some customers may be more deserving of one-on-one attention than others. This research suggests that it is more useful to provide PPS to heavy users, those who are open to new experiences, and those who are market mavens. How can a supplier identify appropriate targets for providing PPS? The population of customers to whom PPS can be provided is limited to those who have actually purchased a supplier's product. A supplier is aware of the identity of actual customers in B2B contexts, as well as in B2C contexts in which a supplier deals directly with a customer (e.g., Amazon.com). The supplier can assess the usage intensity, openness to experience, and mavenism of its customers on the basis of their past behaviors and reactions to new products, programs, and ideas. In addition, the supplier can directly ask such customers whether they would like to be contacted to help prevent problems and receive product usage tips and to obtain their feedback. The supplier can then use this knowledge to vary the level of PPS across customers. In B2C contexts in which a supplier sells to a customer through a distributor or retailer, however, the identification of customers and their characteristics is less clear cut. A supplier must either rely on retailers for this information or use mechanisms such as warranty registration cards or promotions or request cards that ask customers to inform the supplier of their contact information and their behavioral tendencies.

This research also indicates that depending on the product involved, it may be more or less useful to provide PPS. It suggests that proactive prevention and proactive education are more valuable in the intermediate stage of a product life cycle, whereas proactively seeking feedback is more important in the early stage. It also suggests that all three types of PPS—prevention, education, and feedback seeking—are more valuable for products that have lower transaction extensivity. Similarly, it argues for the differential usefulness of PPS depending on the type of PPS and the network externality of a product. It would be useful for managers to consider their particular contexts—products and customers—and evaluate the desirability of providing each of the three different types of PPS to some or all customers.

A supplier may view PPS as a way to differentiate itself from competing offerings. This is particularly so because it

is difficult for a competing supplier to quickly develop the organizational capability to implement PPS effectively. Indeed, implementing PPS in a consistent and sustained manner is not easy, and it requires that organizations are open to learning from feedback and making continuous improvements. As we noted previously, many problems can arise from poor PPS implementation. These include customers viewing PPS as thinly disguised efforts to sell more and as intrusions into their privacy. Although these may be relatively easy to address, it is more difficult to build the capability to provide PPS that is empathic rather than superficial and reaches out to customers only when they would find it of value, while keeping customers from unreasonably demanding ever more from the supplier.

## **Research Directions**

There are several opportunities for further research on PPS. First, a worthwhile avenue is to explore the locus of PPS design and implementation within a supplier firm. Typically, customer initiatives reside within the marketing, customer service, and/or sales functions. Thus, a key question is whether a single function should be responsible for all three forms of PPS (i.e., proactive prevention, proactive education, and proactive feedback seeking) or whether PPS responsibilities should be distributed across multiple functions and, if so, what specific configurations are more effective. How should the distributed implementation be coordinated such that it is perceived as seamless by customers? It would also be instructive to examine why some suppliers choose one structure over another and the impact of different structures on PPS effectiveness. These answers are likely to vary between B2B and B2C firms because of the different nature of their customer bases, thus calling for further exploration of PPS in the two contexts.

The process for embedding PPS initiatives within an organization requires deeper investigation. In the initiation stage of getting an activity embedded (see Gebhardt, Carpenter, and Sherry 2006), it would be useful to examine whether a supplier should simultaneously roll out all forms of PPS (i.e., proactive prevention, proactive education, and proactive feedback seeking) or sequence them in a particular order. For example, our group interviews indicate that customers feel most vulnerable right after the purchase of a technologically complex product because they are often unsure about using it appropriately. Under such conditions, perhaps it is more desirable to lead with proactive education. Likewise, it would be useful to investigate conditions that warrant leading with either proactive prevention or proactive feedback seeking.

Perhaps just as important as the previously noted questions, it would be of interest to identify the ways some suppliers leverage their PPS efforts to generate future sales and realize higher prices from customers. Part of this has to do with a supplier's ability to leverage customer risk mitigation to its own advantage. This entails being able to demonstrate the value of risk mitigation convincingly to customers. This is not straightforward, because customers may not recognize the value of PPS, especially proactive prevention, unless they encounter a failure. Similarly, another related

issue is understanding how a supplier can extract value from proactive education that enables a customer to derive greater benefit from a product. In many cases, the value of PPS may need to be captured by a supplier in follow-up sales to a customer rather than in a current sale. This approach to capturing the value of PPS may work if there are frequent repeat sales, but how can a supplier extract value if the time lag between one purchase and the next is long?

It would also be useful to understand organizational factors that help some suppliers provide PPS well and use it as a basis for competitive differentiation. Proactive postsales service requires a deeper commitment to customers than alternative approaches, but as we discussed previously, its value may not be captured by a supplier immediately. It is likely that certain types of organizations are willing to invest for a payoff in the future, whereas others are less amenable. It is also likely that factors related to cultural elements and performance measurement metrics play a major role in whether an organization decides to engage in PPS. It would be useful to explore these and other antecedents of a PPS-oriented supplier.

Although these research directions focus on suppliers, it would also be worthwhile to examine the impact of PPS on a supplier's employees. Does the provision of PPS by a sup-

plier affect the morale of its employees? Does the existence of formal PPS processes in a supplier organization implicitly encourage its employees to be proactive in coming up with innovative solutions for addressing customer problems? Similarly, further research could investigate whether certain types of employees are more suitable for providing PPS than others. Providing PPS requires that employees have a willingness to serve without being prompted or asked. Likewise, it requires refraining from cross- or up-selling. Investigating the extent to which such PPS behaviors are dispositional versus learned would be useful.

Our focus group data are from two regions in the United States. Although our insights may be generalizable to the rest of United States, empirical investigation in both the United States and other countries is warranted before broader generalizations can be made. This is likely to be especially true for implementing PPS because regulations (e.g., privacy laws) may require adaptations to the suggestions provided. Finally, because PPS research is in its infancy, at this stage of its development, it would be particularly useful to investigate PPS-related issues using qualitative approaches, such as case studies and depth interviews. These approaches are more likely to capture the richness of the phenomenon, its implementation, and the consequences.

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