The Effect of Tangibilizing Employee Expertise on Consumer Responses

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Abstract

Although it is common to find instances of tangibilizing employee expertise in service practice, its marketing benefits are still not clear. The present research investigates how tangibilizing employee expertise influences consumer responses. Based on an experiment, the authors find that tangibilizing expertise has a favorable effect on consumers’ perception of employ expertise and service evaluations; participants made more positive evaluations of employ expertise and service experiences when employee expertise was presented in a more tangible manner using material display rather than verbalization. In addition, this effect was more salient for consumers with a low (vs. high) level of product knowledge.

Key words: tangibilizing employee expertise, product knowledge, expertise perception, service evaluation
INTRODUCTION

As services are usually intangible performances, employees play a central role in service provision: they represent the firm, define the offerings, and are responsible for delivering them to consumers (Price, Arnould and Tierney 1995; Shostack 1977; Solomon, Surprenant, Czepiel and Gutman 1985). The services literature has suggested a number of employee attributes that are desirable for service success. Among them, expertise has received considerable attention. Expertise refers to employees’ knowledge and competencies related to the service (Crosby, Evans and Cowles 1990). Previous research suggests that employee expertise has a great impact on consumers’ perceptions of service quality (Parasuraman, Zeithaml and Berry 1988) as well as their long-term relationships with the firm (Doney and Cannon 1997; Sirdeshmukh, Singh and Sabol 2002).

Despite being an important attribute of service employees, expertise is intangible by nature and is thus considered difficult to evaluate (Laroche, Yang, McDougall and Bergeron 2005). For many services such as psychotherapy, legal services, and business consulting, consumers may not be able to judge employee expertise even after purchase (Darby and Karni 1973). This realization prompts service firms to present concrete manifestations of employee expertise to facilitate consumer evaluation. For instance, photographers often exhibit some representative works in the studio to convey their skills and abilities. Physicians tend to display their diplomas and credentials in the office to communicate their education background. Consumers often find employee profiles in hair salons, which show hairdressers’ honors at competitions. In all these instances, the intangible attribute of employee expertise is tangibilized via its non-abstract manifestations.

Although tangibilizing employee expertise is a common and compelling practice in service industries, its marketing benefits have not been corroborated. First, tangibilized expertise indicates service employees’ potential to deliver the service smoothly, and the potential may or may not be actualized in a particular service transaction. As such, Sirdeshmukh et al. (2002) contend that employee expertise is less likely to be processed unless it is translated into observable behaviors. Second, the manifestations of employee expertise are not necessary components for completing a service; rather, they merely serve to convey information to consumers. Therefore, consumers may generate suspicions about the firm’s ulterior motives for such persuasive efforts and thus ignore or downplay this information in evaluation (Friestad and Wright 1994).

In addressing these concerns, the present research aims to examine the effect of tangibilizing employee expertise on consumers’ perception of the employee and evaluation of the service. Moreover, the authors propose that the level of knowledge consumers possess about the service category will play a moderating role in the evaluation process. The remainder of this paper is organized as follows. The authors next review the research on tangibilizing the intangible, followed by development of hypotheses. Then, the details about an experiment are provided. The authors conclude by discussing the findings and suggesting future research directions.

LITERATURE REVIEW
Tangibilizing the Intangible

In the services literature, intangibility is defined as the lack of physical representation and the consequent inaccessibility through the senses (Laroche et al. 2005). According to this definition, services are usually considered as intangible performances that cannot be seen, felt, tasted or touched prior to purchase (for a review, Zeithaml, Parasuraman and Berry 1985). Previous research shows that service intangibility is associated with perceived risk and variability (Murray and Schlacter 1990). Thus, “tangibilizing the intangible” becomes the key to success in services marketing. Tangibilizing the intangible refers to the practices of using tangible attributes to create satisfying service experiences. To illustrate, Shostack (1977, p. 78) notes that “Although the quality of medical service may be identical, an office furnished in teak and leather creates a totally different ‘reality’ in the consumer’s mind from one with plastic slipcovers and inexpensive print.” Moreover, Berry and Clark (1986) suggest four ways to make the service more tangible, including physical representation, visualization, association, and documentation.

Empirically, a number of studies provide evidence that tangible attributes have significant influences on consumers’ cognitive, affective and behavioral responses in service encounters. For example, Kotler (1973-1974) finds that retail atmosphere can communicate the retailer’s concern for consumers and arouse their visceral reactions. Similarly, Baker, Parasuraman, Grewal and Voss (2002) reveal that store environment has a favorable impact on consumers’ merchandise value perceptions and store patronage intentions. In addition, Parasuraman, Zeithaml and Berry (1988) as well as Brady and Cronin (2001) show that the tangibles of a service constitute a key antecedent of perceived service quality. On the other hand, tangibilization has also been demonstrated to play an important role in the advertising contexts. Specifically, Stafford (1996) shows that providing informational cues on the tangible dimensions of the service has favorable effects on attitudes toward the advertisement and the service, as well as patronage intentions. Similarly, Hill et al. (2004) find that documentation strategies, which are designed to provide specific and concrete information or verbal tangible cues, are positively related to perceived advertising informativeness, perceived service quality, and the likelihood of using the service.

One limitation of the current literature on tangibilizing the intangible is that most studies focus on intrinsically tangible attributes such as physical ambience, service facilities, and employee appearance or deal with advertising contexts. However, there is little attention on the wide range of tangibilized attributes available in the consumption of services. Tangibilized attributes are defined as the tangible manifestations of intangible attributes, including accreditation, employee certification, as well as other explicit or implicit signals and artifacts (Berry and Clark 1986; Bitner 1992). Tangibilized attributes are distinct from intrinsically tangible attributes as they are not necessary components of the service, but serve as manifested evidence to convey abstract information to consumers. Unfortunately, to date little is known about how tangibilized attributes influence consumers’ evaluation of the service. In sight of this limitation, the present research focuses on the intangible attribute of employee expertise and investigates the impact of tangibilizing employee expertise on consumer responses.
HYPOTHESES DEVELOPMENT

Effect of Tangibilizing Employee Expertise

Employee expertise is defined as contact employees’ abilities, knowledge, and skills related to the service (Doney and Cannon 1997; Sirdeshmukh et al. 2002). The positive relationship between employee expertise and consumer evaluation of service is well established in the literature. For instance, Parasuraman et al. (1988) find that service employees’ competence and knowledge have a positive impact on consumers’ overall evaluation of service quality and recommendation intention. Crosby and his colleagues (Crosby et al. 1990; Crosby and Stephens 1987) discover that employee expertise is a critical determinant of consumers’ satisfaction with the service employee, which in turn is positively related to their overall satisfaction with the service and the firm. In addition, Price, Arnould, and Deibler (1994) argue that employee expertise facilitates an efficient, capable, and thorough service encounter, which in consequence will elicit consumers’ positive affect about the service.

Although employee expertise plays a determinant role in creating a satisfying service experience, its intangible quality leads to perceived cognitive and behavioral difficulty in judging employee expertise (Laroche et al. 2005; McDougall 1987). As a result, customers may undervalue employee expertise or perceive uncertainties about their evaluation, both of which are negatively related to customer satisfaction. This implies that tangibilizing employee expertise and increasing its tangibility level can conceivably contribute to consumers’ perception of the expertise and evaluation of the service. The rationale is that a more tangible representation of employee expertise will enhance the salience and accessibility of this information, which leads to consumers’ greater likelihood of information utilization in evaluation (Lynch, Marmorstein and Weigold 1988). Moreover, presenting employee expertise in a more tangible manner can help consumers process this information. As a result, consumers will be more confident in their comprehension of tangibilized expertise, and its effect on employee and service evaluation will be enhanced. Indeed, research on service advertising empirically demonstrates the benefits of documenting intangible attributes (Hill, Blodgett, Baer and Wakefield 2004; Stafford 1996). For example, Stafford (1996) shows that advertising that provides informational cues on the tangible dimensions of the service has favorable effects on attitudes toward the advertisement and the service, as well as patronage intentions.

Based on this discussion, the authors hypothesize that tangibilizing employee expertise will have a positive effect on consumers’ evaluation of the employee and service: the more tangibilized employee expertise is, the more favorable evaluation of expertise and service will be.

H1: Consumers will (a) perceive the employees having a higher level of expertise and (b) make more favorable evaluations of the service when employee expertise is presented in a more (vs. less) tangible manner.

Moderating Effect of Consumer Knowledge

The authors further postulate that the effect of tangibilizing employee expertise...
onconsumer responses will be moderated by the level of knowledge that consumers have about the service category. Consumer knowledge is defined as the amount of information about the product or service that is stored in consumers’ long-term memory (i.e., objective knowledge) or consumers’ perceptions of what or how much they know about the product or service (i.e., subjective knowledge; Park, Mothertbaugh and Feick 1994). It is well documented that consumer knowledge plays an important role in various aspects of consumer behavior such as information search (Brucks 1985; Rao and Monroe 1988) and information processing (Bettman and Park 1980; Park and Lessig 1981).

More specifically, Punj and Staelin (1983) showed that consumers’ product knowledge resulted in a greater amount of external information search, and Brucks (1985) found a positive relationship between consumers’ knowledge and the variability of information search. Similarly, Johnson and Russo (1984) discovered that consumers’ knowledge improved their ability to learn new information and thus facilitated information acquisition. As such, regardless of how employ expertise is presented (i.e., in a more or less tangible manner), consumers with a high level of knowledge would be self-motivated to search for and acquire this information. In contrast, consumers with a low level of knowledge would seek and process only a subset of information that is salient in the environment. That is, the information about employ expertise tends to be ignored and is likely to be acquired only if it is sufficiently tangible, which will lead to better comprehension of employee expertise and consequently more favorable service evaluations.

In addition to the amount of knowledge, consumers’ knowledge structure has important implications for their information processing style (Alba and Hutchinson 1987). Highly knowledgeable consumers have access to both concrete and abstract information about product and are confident in using this knowledge in the decision process. In contrast, less knowledgeable consumers have some concrete information but relatively little abstract information and are more likely to utilize surface-level information in making a judgment (Chi, Feltovich and Glaser 1981). In a similar vein, Park and Lessig (1981) found that consumers having a low level of knowledge used functional dimensions of a product (i.e., product attributes) to evaluate product quality, whereas consumers with a high level knowledge relied more on non-functional dimensions such as brand. Since employee expertise is physically inaccessible and mentally difficult to be understood (Laroche, Bergeron and Goutaland 2001), it shares similar characteristics with abstract information and non-functional dimensions. Therefore, employ expertise, whether it is presented in a tangible fashion or not, is likely to be processed and to have an influence on their responses when consumers are equipped with sophisticated knowledge structure. For those with a low level of knowledge, however, the information needs to be communicated in a clear and precise manner like material display to have significant effects (Laroche et al. 2005), and its tangibility level will serve as heuristic cues to formulate their responses (e.g., Chaiken 1980). In sum, the authors hypothesize that:

H2: The effect of tangibilizing employee expertise on (a) consumers’ perception of employ expertise and (b) their evaluation of service will be stronger for consumers with a low level of knowledge than for those with a high level of knowledge.

EXPERIMENT
Method

Subjects. Fifty-three undergraduate students at a major university participated in the experiment as part of a class requirement and for a small gift (mean age = 21.5, female = 60%).

Design. The experiment used a 2 (tangibility of employee expertise) × 2 (consumer knowledge) full-factorial design. Tangibility of employee expertise was operationalized by documenting this information in two forms: verbal communication and material display. Specifically, employee expertise was conveyed via a chat between the service provider and the customer (i.e., verbal communication) or by displaying an employee profile at the service site (i.e., material display). Material display is considered more tangible than verbal communication since material display can be accessed through both visual and tactile senses and is more concrete and vivid than mere verbalization (Berry and Clark 1986; Stafford 1996). Consumer knowledge was measured, and the sample was submitted to a median split to create two levels: high vs. low. Descriptive analyses indicated that participants in the high knowledge condition perceived themselves more knowledgeable about haircut services (4.76) than those in the low knowledge condition (2.95; t(51)=−8.05, p< .001).

As the target service, hair salon was selected because it was widely used by and was familiar to student participants. A pretest showed that it had a large variance in consumer knowledge. Employee expertise was operationalized using service provider’s educations, training, and working experiences, and a relatively high level was included to enhance the realism. More specifically, the hairdresser graduated from a hairstyling academy in France and had 10-year work experience at a famous hair salon in the city. The hairdresser’s gender was not identified in case of gender differences. All the manipulations are summarized in Appendix A.

Procedure. Upon arrival, participants were randomly assigned to one of the four conditions. Instructions informed them that this research aimed to better understand consumer responses to services. After receiving instructions, participants were asked to imagine that they needed a haircut service and were visiting a hair salon. Then, they were exposed to a service scenario, which included the manipulations. Notably the same words were used to describe the service provider’s behaviors during the service in order to make his or her operational expertise constant across conditions. As requested, participants read the scenario carefully and answered several questions. After completing the questionnaire, participants were debriefed and dismissed.

Measures. Consumers’ perception of employee expertise was measured by asking participants to rate the service provider on five 7-point Likert-scale items (reliable, experienced, skilled, competent, professional [Cronbach alpha = .88]; Crosby et al. 1990). For service evaluation, participants evaluated the haircut service on three 11-point semantic differential items, scores ranged from -5 to +5 (dissatisfied-satisfied, dislike-like, unfavorable-favorable [Cronbach alpha = .95]). To measure participants’ product knowledge, they were asked to rate how much they know about haircut service on two 7-point semantic
differential items (in general, know very little – know a lot; relative to others including friends and acquaintances, less knowledgeable – more knowledgeable [Cronbach alpha = .85]; Park et al. 1994).

**Results**

Participants’ demographic characteristics did not yield any effect and were thus omitted from consideration. To test the hypotheses, two sets of ANOVA were performed with expertise tangibility and consumer knowledge as independent variables, and participants’ perception of employee expertise and evaluation of service as a dependent variable, respectively. First, for employee expertise perceptions, the main effect of tangibility was not significant ($F(1, 49) < 1, p > .05$), although the pattern of means was consistent with the hypothesized direction ($M_{display} = 5.10$ vs. $M_{verbal} = 4.84$). Thus H1a was not supported. However, the two-way interaction between expertise tangibility and consumer knowledge was significant ($F(1, 49) = 6.70, p < .05$). As expected in H2a, participants who were less knowledgeable about the service category perceived the hairdresser as having a higher level of expertise when the expertise information was presented in a more tangible manner ($M_{display} = 5.08$ vs. $M_{verbal} = 3.85$), whereas those who were more knowledgeable showed a smaller difference in the expertise perception ($M_{display} = 5.10$ vs. $M_{verbal} = 5.83$).

Second, for service evaluations, ANOVA revealed a significant main effect of expertise tangibility ($F(1, 49) = 3.95, p < .05$). Consistent with H2b, participants provided more favorable evaluation of the haircut service when the hair salon communicated its employee expertise in a more tangible fashion ($M_{display} = 3.66$ vs. $M_{verbal} = 2.69$). In addition, the main effect was qualified by a significant interaction between expertise tangibility and consumer knowledge ($F(1, 49) = 3.46, p = .069$); participants with a low level of knowledge made much more favorable evaluations of the service when employee expertise was presented in a more tangible manner ($M_{display} = 3.75$ vs. $M_{verbal} = 1.83$), whereas tangibility did not have a significant effect on service evaluations for participants with a high level of knowledge ($M_{display} = 3.62$ vs. $M_{verbal} = 3.56$). Thus, H2b was supported.

In order to examine the mediating effect of employee expertise on service evaluations, a $2 \times 2$ ANCOVA was conducted, with the former as a covariate and the latter as a dependent variable, and then the effects were compared to those from the ANOVA without the covariate (Baron and Kenny 1986). When employee expertise was used as a covariate, the main effect of expertise tangibility still remained significant ($F(1, 48) = 3.72, p = .06$). However, the interaction of expertise tangibility and consumer knowledge became non-significant ($F(1, 48) = 2.59, p = .12$), and F-value reduced from 3.46 to 2.59. These results suggest a mediated moderation in that consumers’ perception of employee expertise mediated the interaction effect of expertise tangibility and consumer knowledge on service evaluations.

**CONCLUSION**

Despite the common practice of tangibilizing employee expertise in service industries, there is
little empirical evidence for its marketing benefits. Using an experiment, this research investigates how tangibilizing employee expertise influences consumers’ perception of employee expertise and their subsequent evaluation of the service. The authors find that tangibilizing expertise has a favorable effect on consumer responses and that this effect is more salient for consumers with a low level of knowledge. It is also demonstrated that the interaction effect on service evaluations is mediated by consumers’ perception of employee expertise.

Theoretical Contributions

The present research makes several contributions to the services literature. First, even though different ways have been suggested for “tangibilizing the intangible,” (Berry and Clark 1986), previous research mainly focuses on intrinsically tangible attributes. This focus limits our understanding of the marketing benefits of tangibilizations as tangibilized attributes may affect consumer behavior differently from intrinsically tangible attributes. In the present research, the authors provide initial empirical corroboration for the effect of tangibilizing employee expertise on consumers’ expertise perception and service evaluation. In addition, the authors take a nuanced examination on its variance across different levels of tangibilization and consumer knowledge. As such, the study’s findings fill an important void in the services literature and contribute to a more comprehensive understanding of the tangibilization strategy.

Second, recent research on employ expertise has differentiated two types of employee expertise: inherent expertise and operational expertise (Sirdeshmukh et al. 2002). Specifically, inherent expertise refers to the competencies that an employee has possessed for completing the service, which is consistent with the definition in this research. Operational expertise refers to the employee’s competent execution of behaviors in the service encounter. Sirdeshmukh and his colleagues argue that consumers’ evaluation of employee expertise is largely based on employees’ operational expertise, as inherent expertise is less likely to be processed unless it is translated into observable behaviors. In this research, the authors demonstrate that employees’ inherent expertise, when tangibilized at the service site, can increase service evaluations via its positive effect on consumers’ expertise perception. More importantly, this study suggests that this effect is independent from operational expertise. That is, while employees’ inherent expertise has a determining effect on their operational expertise (i.e., observable behaviors), the study’s findings emphasize that tangibilizing expertise has a direct impact on consumer responses, even though the same level of operational expertise is observed.

Managerial Implications

This research also has important implications for service firms. The findings imply that while tangibilizing employee expertise is generally beneficial, firms should adopt different tactics based on the levels of consumer knowledge. Specifically, for consumers with a high level of knowledge, tangibilizing high levels of employee expertise will suffice, regardless of the level of tangibility. For less knowledgeable consumers, firms should try to present the information about employee expertise in a highly tangible manner and make the information easily comprehensible.

Limitations and Future Research Directions
This research has some limitations that provide opportunities for future research. First of all, there is a concern about the study’s use of experimental setting. Specifically, participants were almost forced to process the manifestations of employee expertise, and they lacked personal experience of the hairdresser’s performance. As a result, participants might have to rely on tangibilized expertise to make expertise perceptions. In real service settings, however, consumers have a number of cues to evaluate employee expertise, such as the employee’s behaviors in the service encounter as well as the service firm’s brand image and servicescape. In this situation, tangibilized expertise may receive little attention, and its effect on consumer evaluations may be overwhelmed by the other influencing factors. Therefore, future research should employ a different method (e.g., survey) and consumers’ real service experiences to enhance the generalizability of the findings.

Moreover, in this study tangibility was manipulated as either verbal communication or material display. This manipulation is based on the definition of tangibility as well as the common practices in service industries. However, compared with real service settings, the paper-and-pencil experimental setting may reduce or amplify the tangibility differences between these two forms of information presentation. Therefore, future research may tangibilize employee expertise in other ways to rule out this methodological anomaly and further validate alternative explanations. In addition, only one type of services (i.e., hair cut) was included in the experiment although previous research suggests that search, experience, and credence services differ from each other in many aspects, such as consumers’ risk perception, information seeking behaviors as well as perceived evaluation difficulty (e.g., Mitra, Reiss and Capella 1999; Ostrom and Iacobucci 1995). As such, it may be fruitful to probe the differential effects of tangibilizing employee expertise across service categories as well as the mechanisms underlying these effects.

Finally, this research focuses on the impact of tangibilizing employee expertise on consumer evaluations of a specific service transaction, but overlooks its long-term consequences. It will be worthwhile for future research to investigate how tangibilizing employee expertise influences consumers’ behaviors in the long term, such as their perceptions of brand image, accumulated satisfaction as well as the relationship with the firm (e.g., trust, loyalty).
References


Figure 1. The Effect of Expertise Tangibility and Consumer Knowledge on (a) Employ Expertise Perception and (b) Service Evaluation
Appendix A. Experimental Scenarios

**Low Tangibility Level: Verbal Communication**
You needed a haircut and went to a nearby hair salon that was newly opened. The salon manager welcomed you and assigned a hairdresser to you. After waiting for a while, you were taken to your hairdresser. The hairdresser gave you a casual greeting and asked about your preferred hairstyle. After that, the hairdresser began to work. During the service, you talked to the hairdresser. You learned that the hairdresser graduated from a hairstyling academy in France/a local hairstyling academy and had worked at a famous hair salon in your city for over 10 years/a small neighborhood hair salon for about a year. In addition, the hairdresser had won first and second awards at international hairstyling competitions/had once participated in a local hairstyling show. While talking, the hairdresser regularly checked on your response and cleaned hair debris. When the haircutting was over, the hairdresser asked if you had any further requests. Finally, the hairdresser said goodbye to you and welcomed you to visit the hair salon again.

**High Tangibility Level: Material Display**
You needed a haircut and went to a nearby hair salon that was newly opened. The salon manager welcomed you and assigned a hairdresser to you. While awaiting your turn, you looked around the waiting area. There was a variety of information about the hair salon, including the hairdressers’ profiles. You looked at the profiles of your hairdresser. You learned that the hairdresser graduated from a hairstyling academy in France/a local hairstyling academy and had worked at a famous hair salon in your city for over 10 years/at a small neighborhood hair salon for about a year. In addition, the hairdresser had won first and second awards at international hairstyling competitions/had once participated in a local hairstyling show. After waiting for a while, you were taken to your hairdresser. The hairdresser gave you a casual greeting and asked about your preferred hairstyle. After that, the hairdresser began to work. During the service, you talked to the hairdresser, and the hairdresser regularly checked on your response and cleaned hair debris. When the haircutting was over, the hairdresser asked if you had any further requests. Finally, the hairdresser said goodbye to you and welcomed you to the hair salon again.