Toward a consumer-based framework for balancing human employees and technologies in service interactions

Automation, which is defined as the replacement of human employees by technology, has a profound effect on the nature of service and on customer-firm interactions. Experts predict that by 2020, 85% of all interactions between a service organization and a customer will be handled without a human employee. Although the automation of service interactions can be technically and economically feasible (e.g., lower costs), it should also be feasible from a customer perspective. The potential impact of automating frontline service behaviors on key customer outcome variables (such as satisfaction, loyalty, and word-of-mouth) makes a better understanding of the customer's perspective on touch-versus-tech crucial for both managers and scholars.

Prior studies provide preliminary insights into the impact of replacing human employees by technologies on the customer experience and indicate that automation can be beneficial or detrimental from a customer's perspective. However, research examining the specific frontline service behaviors that can and cannot be automated from a customer's perspective is scarce. Furthermore, several researchers call for research on balancing touch (i.e. human employees) and tech (i.e. technologies) in service design.

Although existing service research offers valuable insights into frontline service design, service experience, service technologies, and frontline service employee behaviors, a clear and inclusive framework of frontline service behaviors - i.e behaviors performed by a service provider (human or technology) during direct interactions with customer - is lacking. This hampers finding the right balance between human service employees and technologies from a customer perspective.

This study aims to develop a consumer-based framework of frontline service behaviors which contributes to understanding the touch-tech balance of service design by starting from consumer insights (gathered by customer interviews using the 'Sequential Incidents Technique'; SIT), combining them with existing theoretical concepts from service research, and developing an overview of frontline service behaviors. This framework follows a process-based approach, takes into account different types of behavior, and includes customer as well as service characteristics.

The resulting framework of frontline service behaviors is valuable in multiple ways. First, it bridges theoretical and conceptual studies about the service experience with empirical studies on specific touch-versus-tech experiments. Second, it widens the lens through which we view the balance between touch and tech. This broadened perspective facilitates research not only on individual service interactions, but also on the balance between touch and tech across multiple interactions. Third, the framework provides an excellent starting point to organize existing as well as future research on specific touch versus tech questions. Fourth, starting from this framework, a research agenda is put forward to guide future research on the balance between touch and tech.