TOWARD A CONSUMER-BASED FRAMEWORK FOR BALANCING TOUCH AND TECH IN SERVICE INTERACTIONS

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Automation, which is defined as the replacement of touch (i.e. human employees) by tech (i.e. technology), has a profound effect on the nature of service interactions, customer experiences, and customer relationships with service providers. Consider, for instance, current technological advances in the restaurant industry. Rather than the traditional human-to-human interactions between customers and waiters, some restaurants allow customers to order via self-service kiosks (e.g. McDonalds), while other restaurants start to employ service robots to serve customers (e.g. Pizza Hut). A recent study by the McKinsey Global Institute shows that 50 per cent of behaviours currently performed by human employees can be automated by using currently available technologies. Experts even predict that by 2020, 85 per cent of service interactions will be conducted via technologies, without the involvement of human employees.

Although automating service interactions can be technically and economically feasible (e.g. lower costs), it should also be feasible from a customer perspective. Prior research indicates that customers' interactions with frontline service employees have a significant impact on their customer experience. Hence, automating these interactions has a profound effect on the customer experience and subsequent key customer outcomes such as satisfaction, loyalty, and word-of-mouth.

Previous studies provide initial 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, empirical research examining for which specific behaviours and in which circumstances automation positively or negatively affects the customer experience is currently lacking. For instance, do restaurant customers prefer to be welcomed by a human employee or by a service robot? And do they prefer ordering their meals via a self-service technology or via a human waiter? Is there a difference between fast-food restaurants and luxury restaurants? Furthermore, several researchers call for research on balancing touch and tech in service design. For instance, maybe customers prefer that welcoming is touch but ordering is tech. Hence, research is needed that focuses on specific frontline service behaviours (FSBs) and when and why they can or cannot be automated from a customer perspective.

The potential impact of automating FSBs on the customer experience and subsequent key customer outcome variables makes a better understanding of the customer perspective crucial for both managers and scholars. Managers need to think strategically about service design and must decide - based on consumer preferences - which FSBs can be performed by technologies and which ones should (still) be performed by human employees (i.e. the tech-versus-touch question).

This study aims to develop a consumer-based framework of human versus automated FSBs which presents relevant characteristics that should be taken into account when examining customers preferences for human versus technological interfaces.

To develop this consumer-based framework, the following key service principles are taken into account. First, since employees can perform various FSBs throughout the customer journey, ranging from welcoming a customer when entering to handling the payment before leaving, the types of FSBs (e.g. social behaviour, core service behaviour) are taken into account. Second, previous research shows that customer characteristics play an important role when considering tech-versus-touch as some people are more inclined to accept technologies than others. Hence, customer characteristics (e.g. technology readiness, need for interaction) are included in the framework. Third, based on prior studies on technology in service service characteristics (e.g. communal versus exchange, high-end versus low-end service context) are included in the framework.

To build this framework, a service design thinking approach was used. This is a human-centered, holistic, and creative approach which offers a mind-set for envisioning service experiences, through an iterative process of exploring, visualizing, and reflecting. For this purpose, two empirical studies and multiple methods were used.

The first study consists of a diary study and follow-up interviews with respectively 30 and 27 respondents. The diary study was used to explore various service experiences in order to identify specific FSBs. This method is especially suitable for understanding individual daily customer experiences related to interactions with service providers. Specifically, respondents kept a diary for three weeks. Moreover, an event-based diary design was adopted which implies that respondents had to report their experiences each time they had a physical experience with a service provider. Based on the diaries, service blueprints were developed to visualize the customer journey. Building on these blueprints, we conducted semi-structured interviews using the sequential incidents technique which focuses on incidents in the customer journey to clarify diaries, visualize the customer journey, and understand perceptions about automating FSBs.

In line with the iterative nature of the service design process, we conducted a second study to verify and test the findings of the first study by using an alternative method called storyboarding. A storyboard consists of graphical representations such as drawings, images or pictures to visualize the various touch points of a service experience and can be complemented by a narrative. Taking into account the importance of visualization for service design and the process-based nature of service experiences, storyboards offer an excellent opportunity to refine our framework. Specifically, the respondents receive multiple storyboards that visualize and describe the customer journey by using cartoon-like-images. These storyboards are combined with a context disruption interview protocol which provides additional insights into automating FSBs.

Both studies are analyzed using the software Nvivo along with the Gioia method which offers a systematic approach for generating new concepts starting from the respondents' words, transforming them into theory-centric themes, and combining them into overarching theoretical dimensions.

To conclude, the resulting framework 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 touch-tech balance. 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 touch-tech balance.