



Exploring the Role of Human and Digital Interactions in Online Customer Support

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Exploring the role of human and digital interactions in online customer support: structured abstract

Introduction

The main goal of this study is to explore how human and digital interactions online can enhance customer-organisation relationships through driving a change in customers' cognitive and affective evaluations and behaviours. Process of digitalisation has changed consumers' behaviours considerably through integration of digital technology in nearly every aspect of consumers' life (Zeithaml et al., 2006). Hence, organisations have recognised the importance of delivering high-quality and efficient interactions as a distinguishing factor to achieve competitive advantage and build relationships with consumers (Lemon and Verhoef, 2016). Accordingly, throughout the literature, there have been a number of conceptual papers debating the role of digital technologies and human employees (Bowen, 2016; Larivière et al., 2017; Robinson et al., 2019; De Keyser et al., 2019). For instance, Shankar (2018) argues that service employees will work in tandem with digital technologies, whereas Huang and Rust (2020) debate that once technology develops empathy, service jobs will disappear.

Alternatively, following social presence theory, researchers have acknowledged the importance of achieving high level of social presence in online environment to improve relationships and build trust (McLean et al., 2020). Specifically, it has been argued that higher perception of social presence leads to positive behavioural outcomes (Jiang et al., 2019). Yet, following technology adoption framework and theory of social presence, there is little evidence on whenever social presence conveyed through human and digital characteristics' influence a change in consumers' cognitive and affective evaluations and behaviours (Short et al., 1976; Hassanein and Head, 2007; McLean et al., 2020). Furthermore, it is unclear how digital technology and service employees can work together to improve perception of social presence online which in turn fosters relationships with consumers and improves word-of-mouth communication.

Hereafter, further empirical investigation is required to contribute to consumer research and technology adoption. This research addresses the theoretical knowledge gap by investigating how interactions with digital technology, particularly virtual agent (artificial intelligence), and service employee impact consumer behaviour. By closing this gap, it will add to existing knowledge on technology adoption and will help to understand how organisations can achieve competitive advantage and build relationships with consumers through balancing digital and human interactions within service encounters (Bolton et al., 2018; Verhoef et al., 2019).

Background

Technological advancement has created a necessary demand to deliver prompt communication through online customer support services (Chattaraman et al., 2012). Online customer support services help organisations to increase social presence, strengthen relationships with consumers, enhance overall experience, build up trust and loyalty (Verhagen et al., 2014). Specifically, due to low social presence in online environment, online customer support allows organisations to enhance relationships with customers through instant communication (WilsonNash et al., 2020). Implementing digital agents in the online customer support channel as a communication tool can benefit organisations in various ways (Chi et al., 2020). Firstly, they are available 24/7 and can process unlimited amount of interaction at the same time (Chi et al., 2020). Secondly, Robinson et al. (2019) identify that digital agents are less prone to

mistakes or emotional unpredictability. However, there has been little agreement in the literature on how to deliver valuable interactions using both digital agents and service employees. Moreover, whilst literature shows that service employees can enhance customers' cognitive and affective evaluations, it is not clear how integration of both human and digital agents will influence a change in those evaluations (Bolton et al., 2018).

Indeed, in the recent research done by Larivière et al. (2017), authors conceptualise that in certain service environment, AI-powered technology will substitute the role of service employees as it will perform tasks more efficiently. On the contrary, Huang et al. (2019) acknowledge that due to limited emotional ability and inflexibility of digital agents, it is impossible to eliminate human element from customer support interactions. Furthermore, Robinson et al. (2019) argue that digital assistants will not replace employees, but they will work together towards delivering fast and customer-oriented experience. Both Larivière et al. (2017) and Robinson et al. (2019) question how consumers' interaction with technology and human employee during different stages of service encounter will influence attitudes and behaviours. Therefore, this study aims to understand the role of human and digital interactions during online customer support as part of service encounters in shaping consumers' emotional, cognitive and behavioural responses towards a firm. By examining the role of human and digital interactions in enhancing customer-firm relationships, it will help to close an existing knowledge gap and contribute to consumer behaviour research (Bolton et al., 2018).

Theoretical framework

The following study focuses on establishing a theoretical framework on how firms can strengthen relationships with consumers through digital and human interactions. To further extend the knowledge on customers interactions and to understand how firms can enhance relationships with customers, this study investigates how interplay of human and digital interactions affect cognitive, affective, and behavioural responses towards a firm. To address the research aim, technology acceptance model (TAM) is suggested as a framework for this study.

Originally developed by Davis (1989), TAM aims to explain use of technologies (McLean and Osei-Frimpong, 2019b). TAM is an adaptation of a theory of reasoned action (TRA) which implies that behaviour is predicted by behavioural intentions which in turn impacted by attitudes towards behaviour and social norms (Fishbein and Ajzen, 1975). Building upon TRA, Davis (1989) posited that technology usage behaviour is influenced by behavioural intentions that are impacted by person's attitudes. Following this, TAM suggests that person's attitude is formed by user's beliefs about how easy it is to use a particular technology and user's evaluation of technology usefulness for goals accomplishment (Morgan-Thomas and Veloutsou, 2013).

Therefore, it is argued that consumers' beliefs about technology (perceived social presence and communication channel characteristics') lead to attitudes which in turn influence behaviour and behavioural intentions towards an organisation (Davis, 1989). For instance, Polo and Sese (2016) have concluded that customers rely on their cognitive and affective evaluations that were formed through beliefs and past experiences when engaging in behaviour. Following the research of Dwyer et al. (1987), Polo and Sese (2016) identify that when consumers trust organisations and have positive attitudes, they are more likely to engage in behaviour. Consequently, building upon theory of trust, theory of emotions and TAM, it is hypothesised that customers' cognitive and affective evaluations will affect behavioural responses towards

a firm (Davis, 1989; Lazarus, 1991; Morgan and Hunt, 1994). One of the biggest criticisms of TAM is its simplification as it only has two major variables: perceived ease of use and perceived usefulness (San-Martín et al., 2013; McLean and OseiFrimpong, 2019b).

On the other hand, one of the biggest benefits of TAM that it is highly adjustable to a context (Choi and Kim, 2016). Through past studies, it can be seen that TAM can be modified accordingly by adding relevant factors as predecessors or moderators of perceived usefulness and ease of use (Koenig-Lewis et al., 2015). For instance, applying TAM as a theoretical foundation, Kulviwat et al. (2007) argue that emotions should be considered as antecedents of perceived usefulness and ease of technology as technology can evoke both positive and negative feelings. Alternatively, Gursoy et al. (2019) suggest that with development in technology, perceived ease of use and perceived usefulness should be replaced by other characteristics of technology. Likewise, drawing upon theory of social presence, this study theorises that perceived social presence will have greater impact on consumers' evaluations and behaviours (Hassanein and Head, 2007). Hereafter, based on theory of social presence and TAM framework, Gefen and Straub (1997) argue that in online environments, cognitive and behavioural engagement is affected by consumers' perception of social presence of the medium.

Social presence theory suggests that higher perception of social presence of communication medium will lead to creating stronger relationships and closeness (Short et al., 1976; Gefen and Straub, 2004). Accordingly, social presence refers to a feeling that communication medium is present in the interaction through manipulation of social cues (Gunawardena and Zittle, 1997). Thus, it can be argued that virtual agents help organisations to enhance perception of social presence, particularly a sense of "being there", through social cues such as warmth and empathy (Hassanein and Head, 2007). This in-turn, supports firms in enhancing relationships with customers through online customer support interactions (Chattaraman et al., 2012). Therefore, building upon TAM, TRA and theory of social presence, it is hypothesised that higher perception of social presence will influence customers' affective and cognitive engagements (trust, attitudes and emotions) which in-turn affect behaviour.

Lastly, scholars have found out that consumers' affective and cognitive evaluations impact on customers' beliefs about technology (Kulviwat et al., 2007; Venkatesh et al., 2011). Additionally, literature shows that during service encounters, consumers' affective and cognitive evaluations can fluctuate depending on their experiences (Venkatesh et al., 2011; Kozub et al., 2014). However, there is little knowledge on whether human and digital characteristics can enhance perception of social presence that will trigger a change in affective and cognitive engagements. In-consistency from empirical findings creates an opportunity for further research that this study aims to address. Specifically, extending TAM will help to examine the role of digital and human interactions and perception of social presence in shaping customers' cognitive, affective and behavioural responses towards a firm. It is important to do so to broaden an existing research on how to foster relationships with consumers through interplay of digital and human interactions. Hence, this study's goal is to address the literature gaps and further develop the framework that will allow to explain online interactions with digital and human entities as well as identify how online interaction experience impact on a change in affective, cognitive and behavioural responses towards a firm.

Methodology

The research purpose is to explore how digital and human interactions in customer service journey can enhance relationships. To achieve this aim, research adopts objectivist ontology and positivist epistemology. The research is going to use quantitative research method coupled up with deductive research logic. Experiment research design has been proposed as a research strategy. Hereafter, the purpose of this research is to establish the relationships between consumers' evaluations, online customer support interactions, and behavioural outcomes. Therefore, it can be said that this study requires a manipulation of variables such as manipulations of digital and human agents' interaction characteristics to establish the relationships between variables. Hence, it is suggested to conduct an experiment under two motivational conditions and manipulate level of empathy and responsiveness of customer service agents. This will help to determine how human and digital characteristics affect customers' cognitive, affective and behavioural responses towards a firm.

Conclusions and Implications

Throughout literature, it can be seen that the research in a field of technology, social presence, service employees, and consumer behaviour is fragmented. Specifically, scholars have acknowledged that technology has significantly changed consumer behaviour. However, most of the studies tend to focus on technology or service employees alone. So far, there is little empirical evidence on how successfully implement both technology and human employee interactions in the service encounters that would lead to higher perception of social presence, positive behavioural outcomes and stronger relationships. Therefore, this research aims to close this gap by examining both human and technology interactions in the context of customer support. Addressing this gap is essential because it will help to understand how to efficiently distribute digital and human interactions throughout online service encounters.

Furthermore, there is no unified framework that would explain how digital and human interactions affect a change in cognitive and affective evaluations and behaviours. Consequently, it is not yet clear to what extent does pre-existing consumers' trust, attitude and emotions towards an organisation change through perception of social presence when interacting with different modes of customer service support channel. Thus, this study focuses on addressing the literature gap through developing a theoretical framework that examines whether social presence through interaction with digital and human agents can change consumers' cognitive and affective evaluations towards an organisation that will lead to positive behaviour. Building upon TAM and behavioural theories, this research aims to make a novel contribution and develop a framework that would explain how interactions with human and digital entities during service encounters affect behavioural responses towards a firm. This contribution is important as it will support consumer research by expanding a current knowledge on how firms can strengthen relationships with customers through interaction with digital and human entities during online service delivery.

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