



# Augmented Empathic Capacity: An Integrative Framework for Supporting Customer Engagement Throughout the Automated Customer Journey

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**Abstract.** The rise of automated touch points (ATPs) upsets firm-customer interactions, and its net effect on customer engagement (CE) is under scrutiny. We posit that ATPs negatively affect CE by degrading a firm's empathic capacity. First, ATPs impair human interactions, which decreases the ability to *share* customers' affective and mental states. Then, ATPs rely on computer-based solutions, which increases the ability to *decode* customers' affective and mental states. However, *decoding* without *sharing* affective and mental states can lead to egocentric behaviors, which are reminiscent of those of a psychopath. This threat highlights the importance of redefining the boundaries of empathy. Accordingly, we introduce a new integrative framework: the augmented empathic capacity. It describes two routes that stem from the two main components of empathy: the socio-affective route and the socio-cognitive route. The socio-affective route relies on two emotional connection systems (bottom-up system, top-down system), and aims at sharing customers' affective and mental states. The socio-cognitive route relies on two emotional appraisal systems (covert system, overt system), and aims at mentalizing customers' affective and mental states. The joint evaluation of both routes enables to deploy an empathic chain value—the roadmap for promoting prosocial interactivity and CE throughout the automated customer journey.

**Keywords:** Customer engagement · Emotion · Empathic capacity · Omni-channel retailing · Automated touch points

## 1 Introduction

Engaging customers is important for promoting interactivity, collaboration, and co-creation of value. Customer engagement (CE) is a part of the overall customer experience: it constitutes touch points along the customer journey and results in cognitive, emotional, and behavioral responses (Lemon and Verhoef 2016). Nowadays, touch points evolve significantly. Automated touch points (ATPs)—all automated/computerized forms of interaction—are now an integral part of omni-channel retailing. Chatbot, automatic self-checkout systems or self-ordering kiosks, become essential

touch points along the customer journey and may even replace traditional dyadic interactions between the firm and the customer (Singh et al. 2017). However, the transition from traditional to ATPs is tricky. Recently, Walmart and Canadian Tire removed automatic self-checkout systems in several stores<sup>1</sup>, while Japan's robot hotel Henn-na replaced half of its robots with human employees<sup>2</sup>. Firms explain that automatic systems often break down and cost more than they should have. But customers' complaints are different: some customers think they do the retailers' job; automatic self-checkout systems are cumbersome to use; it is still warmer to interact with employees. The perception gap between firms and customers is interesting as it indicates that ATPs are not customer-focused enough and relate to critical touch points ("moment of truth"; Lemon and Verhoef 2016, p. 82). From the firm's perspective, it is a matter of cost. But from the customer's perspective, it is rather a matter of connectedness. And CE—the extent to which the customer connects with the firm—refers to such a connectedness.

To date, studies have neglected the notion of connectedness despite the call of several researchers for updated models that identify how customers use specific touch points and what the effects of these touch points on CE are (Lemon and Verhoef 2016; Malthouse and Calder 2011). For instance, Ostrom et al. (2015, p. 132) identified the topic "*managing the customer experience across complex and diverse offerings, touch points and channels*" as the third most important research priority among 80 subtopics in retailing and consumer services. Lemon and Verhoef (2016, p. 84) suggested to "*take a fresh look at the customer's overall experience and to determine whether and how new approaches and technologies may be able to remove friction or pain points*". Additionally, Larivière et al. (2017, p. 241) underlined that customers are people first, and the optimal balance between "tech" and "touch" must be found for every firm-customer touch point. More recently, Pansari and Kumar (2017) have shown that customers become engaged with the firm when a relationship has an emotional connectedness. The current paper adopts this line of investigation by understanding the long-term effect—positive, negative, negligible?—of ATPs on CE.

Despite the CE conceptualizations, little attention has been paid to the role of emotion connectedness (Pansari and Kumar 2017). We believe this to be an important aspect for two reasons. First, emotion is an interface between customers and touch points that contributes to transform customer experience into experiential knowledge (Jayanti and Singh 2009; Marinova et al. 2017) and action readiness (approach/avoidance; Scherer and Moors 2019). Second, emotion connectedness refers to the firm's empathic capacity; the capacity to *share* as well as to *understand* customers' affective and mental states in order to develop prosocial interactivity and sustain CE. This paper aims to address these two gaps by introducing the augmented empathic capacity integrative framework to support CE throughout the automated customer journey.

<sup>1</sup> <https://www.cbc.ca/news/business/canadian-tire-self-checkout-cashiers-automation-1.5011981>.

<sup>2</sup> <https://www.hotelmanagement.net/tech/japan-s-henn-na-hotel-fires-half-its-robot-workforce>.

## 2 Unpacking the Emotional Antecedent of CE

Emotion is an antecedent of CE (Pansari and Kumar 2017). It contributes to connect and engage the customer with the firm. But little is known about the psychophysiological antecedents of customers' emotion—and therefore why emotion matters in emotional connectedness and CE. Based on the cognitive appraisal theory (Scherer and Moors 2019), we define emotion as an emergent, dynamic episode that involves a continuous change in customers' cognition, motivation, physiological reactions, motor expressions, and feelings to adapt flexibly to relevant touch point experiences. The elicitation of customers' emotion—and the determination of its characteristics—relies on the subjective, continuous, and recursive appraisal of the touch point experience. Four appraisal criteria structure this automatic, subconscious process (Scherer and Moors 2019):

- (1) Goal relevance, which refers to the congruence between the customer's goal and the touch point experience (*"Is the firm likely to satisfy my needs?"*);
- (2) Valence, which refers to the customer's intrinsic pleasure during the touch point experience (*"Are my interactions with the firm pleasant?"*);
- (3) Agency, which refers to the source or cause of emotional episode (e.g., *Customers? Peers? Firm? Firm's partners?*);
- (4) Fairness, which refers to the altruistic or egoistic-oriented touch point experience (*"Does the firm answer me in a prosocial, altruistic manner?"*).

The cognitive appraisal process results in an emotional episode, characterized by physiological (e.g., skin conductance response), expressive (e.g., facial expressions), and subjective (e.g., feelings) reactions. Since a customer's cognitive appraisal is subjective, there is a potentially infinite number of emotions associated with touch point experiences. Finally, the emotional episode is embodied and experienced in a unified way—the distinction between appraisal and emotion being impossible to consciously establish by the customer—to form the customer's action readiness: approach (emotional connection and engagement) or avoidance (emotional disconnection and nonengagement). Over the long term, the sensorimotor integration and representation of a customer's emotional experiences in the central nervous system help him/her to learn about his/her experiences and to develop experiential knowledge, skills, and approaches to solve touch point-related issues (see the somatic marker hypothesis; Damasio 1996).

Our theory-based definition of emotion emphasizes that the customer's emotional touch point experiences are not only thought about: they are also embodied and they strongly determine the long-term valence and intensity of the emotional connectedness and CE with the firm. It is therefore necessary to maintain an emotional connectedness with customers along their journey to succeed in the cognitive appraisal checks and elicit positive CE. But what are the effects of ATPs on such an emotional connectedness? Customers are primarily human beings who need empathy to connect and engage emotionally and socially with firms. However, the current technological shift in touch points may present the risks of a short-term, profitable strategy only. Limiting firm-customers' interaction to the technical capacity of ATPs would lead to a

rationalization and dehumanization of the relationship that are a source of customer frustration, which is detrimental to CE (Gorry and Westbrook 2011). ATPs reduce the opportunities for emotion-sharing and force customers to rationalize their experiences by adapting them to the technical constraints imposed by ATPs. For example, language-processing algorithms limit the effectiveness of *chatbots* to elementary queries and conversations. Firms gradually lose the physical link with customers—now perceived as a fragment of a transaction process—and compromise their empathic capacity in leveraging emotional connectedness and CE.

### 3 Effect of Automated Touch Points on Firm's Empathic Capacity

Empathy plays a key role in reciprocity-based social interactions between customers and firms to establish emotional connectedness and to engage customers in an interactive, collaborative, co-creative relationship (Wieseke et al. 2012). Although the marketing literature suggests different definitions of empathy, we introduce here a definition that stems from contemporary social neuroscience research, and which will lay the foundation of the augmented empathic capacity integrative framework. Empathy is a sociobiological process referring to our ability to *share* as well as to *understand* other peoples' affective and mental states—feelings and emotions on the one hand; beliefs, thoughts, and intent behaviors on the other. It describes two independent but interacting components: the affective component—mainly automatic and unconscious—and the cognitive component—more controlled and cognitively mediated. Both components are jointly required to elicit empathy, which is oriented toward prosocial action readiness.

Frontline employees are empathic beings who respond spontaneously to customers' affective and mental states, which constitutes the firm's empathic capacity (Wieseke et al. 2012). But what is the consequence on emotional connectedness and CE if frontline employees are replaced by ATPs? We posit that ATPs may negatively affect CE by degrading firm's empathic capacity—a firm's ability to *share* as well as to *understand* customers' affective and mental states in order to engage with them. On the one hand, ATPs elicit loss in human interactions, which decreases the firm's ability to *share* customers' affective and mental states—the affective dimension of a firm's empathic capacity—and results in emotional disconnection with customers. On the other hand, ATPs provide access to an impressive amount of data (big data) and increase the firm's ability to *decode* the customers' affective and mental states—the cognitive component of a firm's empathic capacity—but without increasing its ability to *share* them. Such a firm does not feel and share the customers' affective and mental states: they digitize them, code them, and process them to develop predictive models and streamline customer relations.

However, *decoding* without *sharing* customers' affective and mental states can lead to antisocial and egocentric behaviors solely aligned with the firm's benefits, which we argue are reminiscent of those of a psychopathic individual (Mealey 1995). Such psychopathic firms are unable to *share* customers' affective and mental states. But they are efficient at *decoding* these states and can even take social, emotional, and financial

advantage of others. This “mind-reading” skill—by means of artificial intelligence, big data analytics, and machine learning—would make psychopathic firms competent to anticipate customers’ social and behavioral intentions and manipulate them, whilst lacking consideration for customers’ well-being, devoid of guilt. Over the long term, the firm’s psychopathic behaviors—manipulative, selfish, and antisocial toward customers’ needs and wants—will negatively affect emotional connectedness, CE, and eventually the firm’s performance.

This issue goes beyond empathy in face-to-face, frontline, dyadic interactions: it puts the empathic process at a strategic level of the firm and highlights why a firm’s empathic capacity is important to leverage technology-enabled customer engagement. In order to tackle this issue, we introduce a new integrative framework—the augmented empathic capacity—which describes the firm’s capacity not only to *decode*, but also to *share* customers’ affective and mental states, in order to develop prosociality, build emotional connectedness, promote CE throughout automated customer journey, and eventually sustain the firm’s performance.

### 4 The Augmented Empathic Capacity

The augmented empathic capacity is an integrative framework that describes two sequential routes that stem from the two main components of empathy: the socio-affective route and the socio-cognitive route (Fig. 1).

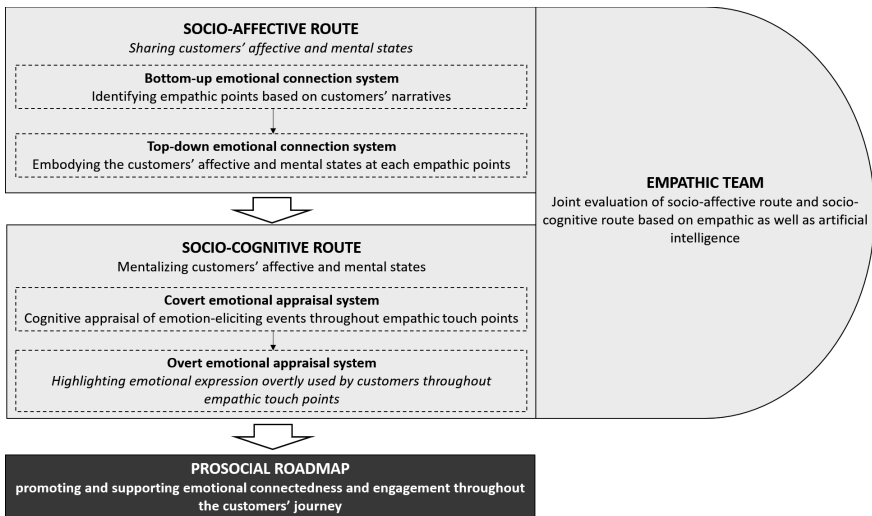


Fig. 1. The augmented empathic capacity integrative framework

#### *The Socio-affective Route of Augmented Empathic Capacity*

The socio-affective route aims at *sharing* the customers’ affective and mental states and appeals to employees’ empathic intelligence. These dedicated employees—the

empathic team—show high scores in emotional intelligence and are trained in empathic intelligence. Listening empathically to customers, correctly identifying the emotional signals they give, being able to adopt the customers’ point of view without confusing the self with others in order to prevent any risk of contagion and emotional distress are all empathic skills that could be taught to employees through the narrative of customers’ experiences. Accordingly, the socio-affective route of augmented empathic capacity relies on two emotional connection systems:

- *The bottom-up emotional connection system*, which refers to empathic panels where what we call “customer-partners” share their affective and mental states in a narrative form with the empathic team, on the firm’s premises. The aim is to define an empathic value chain and to identify “*empathic points*”—the moment of truth—these highly emotional touch points along the customer journey that require a physical interaction structured around the principle of emotional connection.
- *The top-down emotional connection system*, which refers to the deployment of the empathic team in the field to “feel the heat” of in situ experiences with the customer-partners. The aim is to put employees in the customers’ shoes at each “*empathic point*” previously identified, and to embody the customers’ affective and mental states during “*empathic points*” experiences in order to select potential prosocial courses of action.

The socio-affective route of the augmented empathic capacity has several major advantages. First, from an operational perspective, the identification of “*empathic points*” would then enable the deployment of frontline employees for touch points that have value for the customers. This makes it easier to establish an emotional connection with the customers and to respond empathically to their expectations, and to engage with them. Then, from a strategic perspective, identification of “*empathic points*” is conducive to the monitoring of the customers’ affective and mental states related to specific touch point experiences, and then to the dissemination of this information throughout the firm for the continuous improvement of Customer Relationship Management.

If we reason by opposition, the identification of “*empathic points*” makes it possible to identify touch points that do not merit a particular emotional connection with the customer. In that case, the customers would appreciate ATPs because they meet their simple and immediate needs. The augmented empathic capacity model could therefore consider ATPs as the firm’s prosocial, altruistic response to leverage customer engagement. In addition, ATPs would help to protect frontline employees from “empathic fatigue”: feeling empathy at any time and in any place is particularly challenging and can lead to emotional contagion and distress, which would be counterproductive.

### ***The Socio-cognitive Route of Augmented Empathic Capacity***

The socio-cognitive route aims at “mentalizing” the customers’ affective and mental states throughout their journey by using artificial intelligence applications and analytics. While the *sharing* of customers’ affective and mental states can be triggered very quickly and outside the threshold of consciousness, its *understanding* requires explicit and sustained cognitive development that can be disrupted by the lack of time and attention constraints. Moreover, this mentalization process requires a form of anchoring

and of adjusting the inferences developed with others to be effective. Artificial intelligence could assist empathic teams in this mentalization process, and thus facilitate the development of their empathic capacity. Accordingly, the socio-cognitive route of the augmented empathic capacity relies on two emotional appraisal systems:

- *The covert emotional appraisal system*, which refers to the cognitive appraisal of emotion-eliciting events during customers' touch point experience—the cognitive component of emotion. The aim is to “drill data” to identify the origin and the emotional nature of the CE, to situate it in a specific consumption context or touch point experience, and thus better anticipate the customers' intentions and behaviors. Accordingly, the covert emotional appraisal system would facilitate the identification of prosocial solutions adapted to the customers' needs that are sometimes difficult to verbalize.
- *The overt emotional appraisal system*, which refers to emotion labelling by means of sentiment mining and multi-modal emotional recognition such as facial expression and vocalization—the expressive component of emotion. The aim is to identify and understand, on a large scale, how customers emotionally engage with a firm's touch points throughout their journey. The overt emotional appraisal system contributes to highlight the emotional expression overtly used by customers to describe their affective and mental states, and would assist empathic teams in accurately understanding the ongoing customers' affective and mental states throughout the journey.

The socio-cognitive route of the augmented empathic capacity plays an important role in the development of a strategic and prospective approach to augmented empathic capacity. Based on big data analytics, the socio-cognitive route identifies the customers' emotional motivators—the intrinsic, implicit, and emotional goals that guide CE throughout their journey—based on what they *do*, rather than on what they *say*. Indeed, customers are not always fully aware of the real reasons for their engagement, which makes reporting data somewhat unreliable. Behavioral data are more objective and offer the opportunity to continuously determine the motivational drivers of CE—data being digitized and stored in real time, including through the use of smartphones and social networks. Identifying the customers' emotional motivators using big data is a central step in the strategic development of empathy. It refers to the firm's empathic capacity to establish the emotional connection by aligning its brand with the customers' motivations, thus helping it to achieve its far-reaching and unconscious goals (Magids et al. 2015).

Finally, in the augmented empathic capacity integrative framework—as for any empathic process—the joint evaluation of the socio-affective and the socio-cognitive routes is required for the complex evaluation of customers' affective and mental states. The mastering of the socio-affective route as well as the socio-cognitive route by the empathic team members is therefore mandatory for eliciting genuine empathy that would be reflected in the roadmap promoting emotional connectedness and prosociality along the customers' journey.

## 5 Perspectives

The rise of ATPs in retailing and consumer services is a factual situation and the effects of such ATPs on CE are still under investigation. In order to contribute to this important topic, we introduced the augmented empathic capacity integrative framework that triggers an important mind shift: the question is no longer whether ATPs are positive or negative for CE, and/or how to make ATPs more empathic. Rather, the question is at which step of the empathic value chain firms should implement ATPs to promote emotional connectedness, prosociality, and raise CE.

This new perspective breaks with the view that empathy is only a matter of in situ, dyadic interaction, during service or product delivering. Instead, it is regarded as firms' empathic capacity—deployment of ATPs should be a matter of empathy—which results in prosociality based on a technology-enabled interactivity for responding empathically to specific customers' needs (e.g., flexibility, availability, cost reducing). However, and simultaneously, firms need to maintain a physical, emotional connectiveness with customers, specifically where/when “need for human touch” is required.

This is therefore the challenge that firms will have to face in the near future: to develop their augmented empathic capacity and direct it toward empathic Customer Relationship Management in order to promote CE and value creation for both firms and customers.

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