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It's the moment of truth: a longitudinal study of touchpoint influence on business-to-business relationships

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Abstract

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- **Purpose:** Customer–provider relationships unfold through multiple touchpoints across different channels. However, some touchpoints are more important than others. Such important touchpoints are viewed as “moments of truth” (MOTs). This study examines the impact of a series of touchpoints on an MOT, and the role MOTs play in determining future profitability and other behavioral outcomes (e.g., customer retention and customer cross-buy) in a business-to-business (B2B) context.
 - **Design/methodology/approach:** Building upon social exchange theory, a conceptual model is proposed and tested that examines the impact of human, digital, and physical touchpoints and past MOTs on customer evaluation of a current MOT and on future customer outcomes. This research employs a longitudinal methodology based on a unique panel dataset of 2,970 B2B customers.
 - **Findings:** Study results show that all touchpoints significantly contribute to MOTs, while human and physical touchpoints maintain their primacy during MOTs. The impact of MOTs on future customer outcomes is also demonstrated.
 - **Practical implications:** This study highlights the need for prioritizing human and physical touchpoints in managing MOTs, and for carefully managing MOTs across time.
 - **Originality:** Given its B2B outlook and longitudinal approach, this research contributes to the multichannel and interactive marketing literature by determining relevant touchpoints for B2B customers.

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Keywords

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Moment of truth; Customer–provider touchpoints; Multichannel management; B2B interactive marketing; Profitability; Customer retention; Cross-buy

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Article classification

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Research paper

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3 **1. Introduction**
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6 In an era of digital transformation, the complex interplay between business customers
7 and providers through various touchpoints is becoming increasingly critical (Witell *et al.*,
8 2020). Touchpoints are broadly defined as any point of contact between a customer and a
9 provider, from direct in-person communications to digital contacts and even passive
10 interactions (De Keyser *et al.*, 2020). These touchpoints have become more diverse and
11 integrated; however, despite their evolution across multiple channels, the strategic management
12 of touchpoints in business-to-business (B2B) contexts remains significantly underexplored
13 (Witell *et al.*, 2020).
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23 Interactive marketing, traditionally associated with business-to-customer (B2C)
24 markets, is increasingly valuable in B2B contexts as well. In B2B environments, sales processes
25 are longer and involve numerous actors (Mora Cortez and Johnston, 2017). Therefore,
26 incorporating the role of interactivity is essential for understanding and addressing customer
27 needs (Wang, 2024), as it enhances customer engagement and builds stronger, more resilient
28 business relationships (Holliman and Rowley, 2014). Interactive marketing strategies can
29 therefore significantly improve the responsiveness of a B2B company to customer queries and
30 concerns, enabling a more informed and engaged decision-making process (Niedermeier *et al.*,
31 2016; Rocco and Bush, 2016). However, the expanding array of touchpoints presents both
32 opportunities and challenges in managing interactions effectively (Kannan and Kulkarni, 2022).
33 Given the strategic importance of touchpoints and their profound impact on B2B relationships,
34 there is a compelling need for evolving interactive marketing approaches to navigate the
35 complexities of this evolving digital landscape (Wang, 2024).
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53 From an interactive marketing and multichannel perspective, touchpoints can manifest
54 through an array of channels, ranging from traditional in-person encounters to digital platforms
55 such as websites, social media platforms, and mobile apps (Lemon and Verhoef, 2016). The
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3 diversity of touchpoints requires a finer grasp of each unique interaction type. This is
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5 fundamental to effectively managing and optimizing touchpoints. Consequently, there is a
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7 growing scholarly imperative to conduct in-depth research that assesses different touchpoints
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9 across channels (Lim *et al.*, 2023). This is underscored by current managerial trends, where
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11 substantial emphasis is placed on the strategic development of these touchpoints. Companies
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13 are investing in the creation and refinement of touchpoints, as well as their seamless integration
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15 across channels to ensure a cohesive and enhanced customer experience (Lemon and Verhoef,
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17 2016). Such investment is driven by the recognition that effectively managing touchpoints can
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19 lead to positive customer assessments and, ultimately, higher business profitability.
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24 Early research has acknowledged the importance of touchpoints, generally considering
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26 them as moments of truth (MOTs; Bitner *et al.*, 1994). Recent studies, however, have
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28 highlighted that not all touchpoints are the same, with a more focused view of MOTs as a subset
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30 of touchpoints that critically affect customer outcomes (Voorhees *et al.*, 2017). This perspective
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32 has gained traction among both practitioners and scholars, who have highlighted the role of
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34 MOTs as critical touchpoints or specific events that can have a substantial impact on customer
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36 responses (e.g., Gartner, 2016; Voorhees *et al.*, 2017). Furthermore, MOTs have been noted for
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38 their strong influence on the continuity of customer–provider relationships (Roy *et al.*, 2019).
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40 MOTs are key for shaping desired outcomes (Voorhees *et al.*, 2017). It is thus essential for
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42 providers to identify and understand MOTs due to the impact these moments have on related
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44 dynamics (Lemon and Verhoef, 2016). Once identified, firms need to explore how MOTs can
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46 be influenced by other touchpoints, and assess their role in the relationship’s evolution (De
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48 Keyser *et al.*, 2020). Additionally, customer evaluations often draw on past interactions (Ariely
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50 and Carmon 2000), indicating that historical and current interactions together play a critical
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52 role in effectively managing MOTs. Understanding the influence of different touchpoints on
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3 MOTs via an holistic approach that considers both historical and current interactions is vital for
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5 effectively managing MOTs in order to enhance B2B relationships.
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8 Business relationships entail specificities that may affect the evaluation of MOTs and
9
10 subsequent customer outcomes (Mora Cortez and Johnston, 2017). There is a growing call for
11
12 more targeted research in B2B settings to better understand these dynamics (Witell *et al.*, 2020).
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14 Thus, companies must explore how MOTs and other touchpoints influence financial metrics
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16 like profitability, and other outcomes such as customer retention and cross-buy behaviors, in
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18 order to justify the substantial investments in multichannel customer–provider interactions
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20 (Lemon and Verhoef, 2016). Additionally, research is needed to assess the long-term impact of
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22 MOTs on these outcomes (De Keyser *et al.*, 2020; Lemon and Verhoef, 2016). Against this
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24 backdrop, the current study poses the following research questions:
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28 *How do various touchpoints differently influence B2B MOTs?*
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31 *How do B2B MOTs influence profitability and behavioral customer outcomes over time?*
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33 To address these questions, this study applies social exchange theory to explore how
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35 various touchpoints—human, digital, and physical—influence B2B customer evaluations of
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37 MOTs, including the impact of past MOTs on current evaluations, as well as their impact on
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39 future outcomes such as profitability, retention, and cross-buying. Using a longitudinal
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41 approach, we analyze data from 2,970 B2B customers of a leading multinational service
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43 provider.
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46 The study results show that all touchpoints significantly contribute to MOTs; however,
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48 despite the prevalence of digital touchpoints for routine and everyday interactions (Hallikainen
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50 *et al.*, 2019), human and physical touchpoints maintain their primacy during MOTs. Our study
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52 also uncovers the dynamic nature of touchpoints and MOTs, showing how touchpoints
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54 influence MOTs and subsequently shape future customer outcomes. These results enhance the
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56 interactive literature by identifying effective ways in which to prioritize touchpoints for
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3 managing MOTs, and addressing critical aspects of customer–provider relationship
4 management previously underexplored in the literature (Wang, 2022). Businesses should
5 prioritize maintaining and enhancing human and physical touchpoints, especially during MOTs,
6 despite the efficiency of digital channels for routine interactions. This could lead to improved
7 customer satisfaction and stronger B2B relationships, as these touchpoints play a critical role
8 in customer assessments and outcomes.
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12 The remainder of this paper is structured as follows: Section 2 examines the theoretical
13 background of MOTs, presents the conceptual framework, and develops the hypotheses based
14 on social exchange theory. Section 3 outlines the methodology and panel data analysis, and
15 Section 4 outlines the results. Section 5 discusses the results, highlighting the theoretical
16 contributions and managerial implications. Finally, Section 6 concludes the paper and suggests
17 recommendations for further study.
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20 21 22 **2. Theoretical background and conceptual framework** 23

24 25 26 *2.1. MOTs and customer–provider touchpoints* 27

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30 As noted above, MOTs are decisive events in customer–provider relationships
31 (Voorhees *et al.*, 2017). The term was first introduced by Carlzon (1987), who described MOTs
32 as pivotal moments in customer–provider interactions that offer a unique opportunity for the
33 provider to make a lasting impression on the customer. Building on Carlzon’s foundation, early
34 research in this area emphasized the critical role of human interactions in these moments (Bitran
35 and Hoech, 1990). Such interactions are especially important considering that the significance
36 of MOTs is particularly pronounced in situations where things do not go as planned. These
37 incidents often prompt customers to invest considerable emotional energy, making the
38 provider’s response crucial (Beaujean *et al.*, 2006). Subsequent research continued to explore
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3 these dynamics, further focusing on the human aspect of customer interactions during MOTs
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5 (Groth *et al.*, 2019).
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8 In recent years, the concept of MOTs has been related to the customer experience
9 literature (Lemon and Verhoef, 2016), reflecting a broader marketing trend focusing on
10 touchpoints and experiences (e.g., De Keyser *et al.*, 2020). The rising academic and managerial
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12 interest has been driven by the modern customer's access to an ever-expanding array of
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14 touchpoints across multiple channels (i.e., where the interaction takes place) to connect with
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16 firms (Lemon and Verhoef, 2016). The proliferation of touchpoints across multiple channels
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18 offers opportunities for enhanced interactivity, engagement, and personalization, but also
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20 introduces complexities in delivering consistent, quality experiences (Witell *et al.*, 2020).
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25 From this perspective, Voorhees *et al.* (2017) argued that MOTs are related to instances
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27 of contact between a customer and a provider that “significantly impact customers’ impressions
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29 of the firm and consumption” (p. 270). Lemon and Verhoef (2016) also recognized the existence
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31 of these pivotal touchpoints, stating that they have “the most significant influence on key
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33 customer outcomes” (p. 82). Furthermore, previous research has highlighted the significant
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35 impact of MOTs on the trajectory of customer–provider relationships (Groth *et al.*, 2019).
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37 MOTs vary widely by service context. For instance, in insurance, claim management is a crucial
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39 MOT at which customers evaluate the provider's response to an issue (Eling and Pankoke,
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41 2016; Pugnetti and Seitz, 2021). Such experiences are critical for consumers in deciding
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43 whether to continue with, or to switch, providers. Moreover, MOTs often involve multiple
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45 interactions with a provider. Therefore, in the current study we define MOTs as *either singular*
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47 *critical touchpoints or a series of closely related touchpoints occurring during the customer–*
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49 *provider relationship that collectively have a substantial impact on the outcomes of the*
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51 *relationship.*
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3 Furthermore, the intricate relationship between MOTs and these numerous touchpoints
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5 underscores the need for a strategic approach to managing them. Each interaction, no matter
6
7 how brief, has the potential to become an MOT that can significantly influence a customer's
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9 perceptions. De Keyser *et al.* (2020) identified touchpoints as human, digital, or physical, with
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11 each playing a unique role across channels. Human touchpoints involve direct interactions with
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13 employees, emphasizing interpersonal service elements. Digital touchpoints, which are
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15 important for interactive marketing, provide dynamic engagement through online channels
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17 (Holliman and Rowley, 2014; Wang, 2021), and are favored by customers for routine
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19 interactions (Hallikainen *et al.*, 2019). Physical touchpoints, which are associated with the
20
21 tangible aspects of services, are also key in services with intangible offerings, and influence
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23 customer evaluations during MOTs (Cambra-Fierro *et al.*, 2021).
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28 Table I summarizes our literature review of empirical research on touchpoints and
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30 MOTs. A notable observation from this review is that some studies have integrated MOTs
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32 within the broader customer experience framework (e.g., Roy *et al.*, 2019). However, much
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34 research remains conceptual (e.g., Voorhees *et al.*, 2017), and has predominantly focused on
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36 the B2C context, with limited studies addressing B2B settings (e.g., Roy *et al.*, 2019).
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48 Against this backdrop, there is a pressing need to explore how different touchpoints
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50 impact MOTs and key customer outcomes such as profitability, retention, and cross-buying
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52 behavior. Profitability, calculated as the revenue–cost difference per customer, helps to assess
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54 financial contributions (Pfeifer *et al.*, 2005). Customer retention reflects ongoing relationships
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56 (Verhoef, 2003), and cross-buying behavior involves customers purchasing multiple offerings
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58 from the same provider (Kumar *et al.*, 2008). Understanding MOTs' influence on these metrics
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3 is essential for effectively managing touchpoints and ensuring long-term business success (Gao
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5 *et al.*, 2022).
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7 8 *2.2. Hypothesis development* 9

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11 Social exchange theory can be used to explain relationships between individuals
12 (Cropanzano and Mitchell, 2005). Rooted in sociology and social psychology, this theory is
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14 based on the foundational works of Gouldner (1960), Blau (1964), and Cook and Emerson
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16 (1978). Social exchange theory explains interactions within relationships through a cost–benefit
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18 analysis in which individuals assess the rewards and costs of interactions (Cropanzano and
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20 Mitchell, 2005). Widely applied in disciplines such as business, economics, and marketing, it
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22 helps to explain relational dynamics and decision-making processes in organizations (Lambe *et*
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24 *al.*, 2001). The theory emphasizes the principle of reciprocity, in which individuals inherently
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26 feel obliged to reciprocate behaviors, shaping long-term interactions (Bagozzi, 1995).
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32 Within customer–provider relationships, social exchange theory offers a framework by
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34 which to comprehend how customers assess their interactions with a provider (Lambe *et al.*,
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36 2001). This evaluation is a continuous process whereby customers balance the benefits they
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38 accumulate against the costs they incur, which may include monetary expenses, time, effort, or
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40 emotional investment. This cost–benefit analysis crucially influences their decisions to
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42 continue, enhance, or seek alternatives in the relationship. The theory also helps to explain trust
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44 dynamics, where consistent value and positive experiences can create a sense of indebtedness,
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46 leading to positive outcomes. Conversely, negative experiences might cause customers to seek
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48 alternatives. During an MOT, effective resolutions by providers are decisive as they directly
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50 affect future customer loyalty and purchasing decisions. Recognizing the importance of
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52 reciprocal exchanges, providers can strategically tailor interactions to strengthen their
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54 relationships with customers.
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3 Our conceptual framework (Figure 1) suggests that human, digital, and physical
4 touchpoints influence the evaluation of MOTs. Based on the reciprocity principle, we posit that
5 MOTs affect future customer outcomes—that is, profitability, retention, and cross-buying
6 behavior—as customers base their continued engagement with a provider on their MOT
7 evaluation.
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21 Human, digital, and physical touchpoints each play a distinctive role in shaping the
22 outcomes of B2B relationships—a phenomenon that is well-supported by extensive research
23 (e.g., De Keyser *et al.*, 2020; Witell *et al.*, 2020). From a social exchange perspective, these
24 touchpoints are fundamental in customer–provider exchanges. Human touchpoints, particularly
25 those involving sales representatives and employees, are vital in B2B settings and critical during
26 MOTs, as positive interactions strengthen relationships and help to address service challenges
27 (Gao *et al.*, 2022). Positive experiences with provider staff can lead to more favorable customer
28 views of MOTs (Kumar and Kumar, 2016). Companies often create digital touchpoints that are
29 highly interactive and enhance customer engagement (Kauffman and Pointer, 2022), and
30 customers rely on these digital interactions across multiple channels during their service
31 encounters (Bacile, 2020). Digital touchpoints have become ubiquitous in customer–provider
32 relationships, especially in business markets where they are crucial for facilitating ongoing
33 interactions and significantly influence customer assessments during MOTs (Holliman and
34 Rowley, 2014). Physical touchpoints substantially enhance service reliability and security
35 (Cambra-Fierro *et al.*, 2021). The tangible elements of service environments can also alleviate
36 distress during critical MOTs. Thus, we propose that customers rely on these physical features
37 to positively navigate MOTs, and hypothesize the following:
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3 **H1:** *(a) Human, (b) digital, (c) and physical touchpoints positively affect customers'*
4 *evaluations of B2B moments of truth.*
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9 In business relationships, human touchpoints are relevant at every stage. B2B literature
10 has emphasized the significance of human elements in shaping relationship outcomes. Initial
11 interactions with sales representatives, for example, are key in introducing potential customers
12 to offerings and resolving uncertainties (Cicala *et al.*, 2012). Building rapport and effective
13 communication are essential in B2B sales (Kaski *et al.*, 2018). As relationships mature, they
14 often rely on trust and commitment, with resilient connections between employees and
15 customers (Holliman and Rowley, 2014; Mora Cortez and Johnston, 2017). These bonds are
16 often so strong that the departure of key employees can significantly impact these relationships
17 (Shi *et al.*, 2017).
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29 Framed within social exchange theory, the importance of human touchpoints in B2B
30 settings becomes even more evident. This theory posits that relationships are based on the
31 exchange of social and emotional resources, as much as economic ones (Cropanzano and
32 Mitchell, 2005). Positive employee interactions can create a sense of obligation, enhancing the
33 relationship, while negative ones can create imbalances, potentially damaging it. Given this, we
34 argue that in B2B MOTs, human touchpoints are more relevant than physical and digital
35 touchpoints in determining MOT evaluations. Therefore, we propose the following hypothesis:
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46 **H2:** *Human touchpoints have a greater effect on customer evaluations of B2B moments of*
47 *truth compared to physical and digital touchpoints.*
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52 Customers often base their evaluations on past experiences, as they interpret and
53 integrate these experiences to form future assessments (Ariely and Carmon, 2000). In this
54 context, customer assessments may exhibit a trend effect that develops over time. Research has
55 shown that future behavior predictions are grounded in past evaluations (Fredrickson, 2000),
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3 and customer expectations tend to be consistent, indicating that past evaluations significantly
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5 impact future judgments in similar contexts (Lemon and Verhoef, 2016).
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8 In the context of MOTs, past MOTs can shape the evaluation of current MOTs. Positive
9 experiences in past MOTs, where customers perceive provider actions as beneficial, foster a
10 sense of positive exchange and an obligation to reciprocate (Bagozzi, 1995), leading to
11 favorable evaluations in future MOTs. Conversely, negative past experiences can create a
12 perception of imbalance, leading to negative reciprocity in future interactions. Therefore, a
13 customer's experience in previous MOTs likely sets their expectations and attitudes toward
14 subsequent ones. This understanding leads us to propose that the evaluation of a current MOT
15 is significantly influenced by past experiences in similar situations:
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27 **H3:** *Prior B2B moments of truth positively affect customer evaluations of a current B2B*
28 *moment of truth.*
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33 During MOTs, customers assess the provider's response, which in turn shapes their
34 perception of relationship value (Odekerken-Schröder *et al.*, 2000). Social exchange theory's
35 reciprocity principle suggests that customers reciprocate treatment received during these
36 moments (Bagozzi, 1995). Positive responses during MOTs may increase customer gratitude,
37 leading to higher purchase intention and interest in new products. Conversely, inadequate
38 responses may cause customers to disengage or to terminate the relationship. Thus, we propose
39 that positive evaluations of provider responses during MOTs predict beneficial future
40 behaviors, including increased profitability (from repeat purchases and higher spending),
41 improved customer retention (as customers feel valued), and expanded cross-buying behavior
42 (as satisfied customers explore other offerings). Accordingly, we put forth our final hypothesis:
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56 **H4:** *A positive evaluation of a moment of truth positively affects future (a) profitability, (b)*
57 *customer retention, and (c) customer cross-buying behavior.*
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3. Method

3.1 Data collection

To test the conceptual model, data were collected from a leading international insurance company specializing in B2B markets, operating in about 120 countries with over 50,000 employees. The company provided a random sample of 2,970 B2B customers across diverse sectors (e.g., construction, distribution, energy, finance, IT, etc.). Most customers belonged to service industries and the industrial sector, with fewer from the primary sector. The sample included businesses of various sizes, from small to large firms, highlighting the provider's ability to tailor relationships to specific customer needs. The sample's diversity suggests that the findings could be applicable to other contexts (Lam *et al.*, 2004).

The sample comprised data collected over five years, from 2013 to 2017. The dataset contained real data that the provider employs for making key decisions, and included both subjective and objective data. This is especially important, as data that combine both types of information are extremely valuable for determining effects on desirable customer outcomes. The objective data are related to customer outcomes, such as the yearly measures of customer profitability, customer cross-buy, and customer retention. The subjective data were obtained from the results of a yearly questionnaire administered to customers by the provider. The questionnaire included direct questions on how customers assessed several aspects of the interactions and their relationship with the provider on a scale of 0–10. Questionnaire respondents were managers responsible for purchasing decisions in each customer company. The questionnaire covered a broad range of topics; however, given the purpose of this study, we only focused on questions about the evaluation of touchpoints with company employees, digital touchpoints, and physical environment touchpoints. We defined variable operationalization based on prior literature (see Table II).

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10 The variable MOT relates to the evaluation of claim management, and was chosen due
11 to the specific characteristics of the service provider. In insurance, the core agreement provides
12 financial protection or reimbursement if losses occur, which involves risk transfer where
13 customers pay premiums to offset potential harm (Eling and Pankoke, 2016). A key MOT here
14 is the claim—a formal request for compensation defined by the policy terms. How claims are
15 managed is critical, as this influences whether customers switch providers or renew their policy
16 (Pugnetti and Seitz, 2021). Therefore, claim management is an MOT in insurance, embodying
17 the risk-sharing principle and significantly impacting customer outcomes.
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27 28 29 *3.2 Data analysis* 30

31 In empirical research utilizing panel data, various estimation techniques are available,
32 and each has unique advantages. Panel datasets are particularly valuable due to their ability to
33 control for potential measurement errors (Wansbeek, 2001) and to mitigate issues such as
34 estimation bias and data multicollinearity (Hsiao, 1985). Among the commonly employed
35 methods are fixed- and random-effects estimations. These approaches are known as static panel
36 models. To determine the most suitable estimator among these options, the Hausman test is
37 typically conducted, as its outcomes can provide valuable insights concerning estimator choice
38 (Baltagi and Liu, 2016). However, in cases where the dependent variable in a panel data model
39 is potentially influenced by its own historical values, fixed- and random-effects models may
40 not be sufficient (Faustino and Leitão, 2007). This inadequacy arises because these models are
41 designed for static contexts, where the dependent variables are usually not considered to be
42 affected by their past values (Egger and Pfaffermayr, 2005). In contrast, dynamic panel data
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3 models account for the possibility that the dependent variable may be dependent on its past
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5 values.
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8 A prominent method for dealing with dynamic panel data is the generalized method of
9 moments (GMM; Arellano and Bond, 1991; Blundell and Bond, 1998). GMM is particularly
10 suited for dynamic contexts, as it allows for the dependent variable's lagged values to be
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12 incorporated. This feature is crucial in controlling for endogeneity—a challenge often
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14 encountered in dynamic models. In our research, due to the dynamic nature of the relationships
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16 in our proposed model, GMM-based estimations were considered suitable. The approach
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18 allowed us to utilize the lagged values of the dependent variables as instruments, thereby
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20 providing a robust mechanism by which to address endogeneity concerns (Ullah *et al.*, 2018).
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22 This methodology enhanced the reliability and validity of our empirical findings, particularly
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24 in the context of dynamic relationships over time. Nevertheless, it is common practice to
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26 perform multiple estimations and report multiple results; employing a variety of estimation
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28 methods in this study enabled us to examine the robustness of the results (e.g., Dezsö and Ross,
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30 2012; Omri *et al.*, 2015; Surroca *et al.*, 2016).
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38 Furthermore, we performed an alternative analytical approach when the dependent
39 variable exhibited a binary nature, as was the case for customer retention. We turned to logistic
40 or probit panel data analysis because it allowed us to estimate the probability of belonging to
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42 one of the states represented by the binary dependent variable (Hsiao, 1996). Specifically, in
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44 the context of customer retention, where the outcome typically involves customers either
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46 remaining with a service provider or discontinuing their contract, logistic or probit panel data
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48 analysis provided a robust framework for assessing the likelihood of individuals falling into
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50 one of these two states (Bland and Cook, 2019). In Stata, logit models can be estimated using
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52 either fixed or random effects, whereas probit models are estimated using random effects. To
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3 decide between fixed- and random-effects estimation, the Hausman test was used as a
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5 diagnostic tool (Maddala, 1987).
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10 **4. Results**

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13 As mentioned above, the Hausman test is frequently employed to determine whether
14 fixed or random effects are more suitable (Baltagi and Liu, 2016). A significant result from this
15 test indicates a preference for the fixed-effects model. If the test is not statistically significant,
16 the random-effects model may be more appropriate, suggesting that both fixed- and random-
17 effects models would provide similar results. However, the random-effects model is frequently
18 considered to be more efficient (Snijders, 2005). Therefore, a non-significant result obtained
19 from the Hausman test indicates a preference for random effects. In our study, the results of the
20 Hausman test favored random-effects estimation in all cases ($p > .05$). Table III shows the
21 results derived from the various estimations conducted in this study.
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42 To examine the model fit of the GMM estimation, several tests were performed. The
43 overall model fit was determined via the Wald test ($p < .01$; Roodman, 2009). The Hansen test
44 was employed to verify the validity of the instruments. The results suggested that the
45 instrumental variables were not correlated with the error term ($p > .10$; Hansen, 1982). The
46 Arellano–Bond test for second-order autocorrelation was also carried out, and this confirmed
47 that there were no second-order autocorrelations with the error term ($p > .05$; Crépon and
48 Duguet, 1997; Roodman, 2009). The validity of the GMM model was thus established.
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58 In view of the estimation results, the human touchpoint has a significant effect on the
59 MOT ($\beta = .3082, p < .01$), presenting a high impact regardless of the estimation, which supports
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3 H1a. Likewise, the digital touchpoint positively influences the MOT ($\beta = .1539$, $p < .05$),
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5 providing support for H1b. The physical touchpoint also has a significant impact ($\beta = .1926$,
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7 $p < .10$), which supports H1c.

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10 Among all the touchpoints examined in our study, human interactions emerged as the
11
12 most influential factor in determining customers' evaluations of the MOT. This finding was
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14 consistent across all estimation methods employed in the analysis, underscoring the paramount
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16 importance of personal human elements in shaping customer assessments. Physical touchpoints
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18 (e.g., service environment and tangible aspects) and digital touchpoints (e.g., online interactions
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20 and digital interfaces) also have significant impacts. These findings provide support for H2.

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23 The analysis reveals that evaluation of a past MOT exerts a significant effect on the
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25 evaluation of a current MOT ($\beta = .3462$, $p < .01$). This finding underscores the importance of
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27 historical experiences in shaping customer evaluations; it suggests that customers heavily rely
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29 on the past when forming judgments, thus supporting H3. The significant impact of past MOT
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31 evaluations on current evaluations lends substantial support to the use of GMM estimation in
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33 our study. The GMM approach is suitable for handling such dynamic relationships, where
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35 current evaluations are affected by past events.

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38 In terms of H4, the results indicate that MOT evaluations positively affect future
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40 profitability, customer retention, and customer cross-buying behavior. In particular, the effect
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42 of the evaluation of an MOT has the power to determine future customer profitability
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44 ($\beta = .1866$, $p < .01$), which supports H4a. Customer retention was also found to be influenced
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46 by the MOT in both the logit ($\beta = .0106$, $p < .10$) and the probit ($\beta = .0137$, $p < .05$) models, thus
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48 supporting H4b. Lastly, MOTs also influenced customer cross-buying behavior ($\beta = .2112^{***}$,
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50 $p < .01$), thus supporting H4c. This evidence demonstrates that MOTs systematically play an
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52 important role in determining future profitability and behavioral outcomes.
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5. Discussion

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3 This study analyzed the extent to which a series of touchpoints affect MOTs, as well as
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5 the role MOTs play in determining customer outcomes—where positive outcomes are crucial
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7 for ensuring the continuity of relationships in B2B settings. However, while the findings
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9 demonstrate these effects, some aspects deserve further consideration. Table IV summarizes
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11 the theoretical contributions and managerial implications of this study.
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22 *5.1. Theoretical contributions*

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25 This pioneering study significantly advances interactive marketing research by
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27 providing empirical evidence on a topic that is of critical importance but has been under-
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29 researched to date (Wang, 2022). The relevance of MOTs has been recognized by academics
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31 (e.g., Voorhees *et al.*, 2017) and practitioners (e.g., Gartner, 2016) alike. Despite this
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33 acknowledgment, empirical research was needed to comprehensively explain both the specific
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35 elements that influence MOTs and their distinct impact on customer outcomes.
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39 This study analyzed touchpoints and MOTs in a B2B service context. Although the B2B
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41 market has gradually gained attention, empirical investigations in this domain remain limited.
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43 To address this, we answered calls for more research in B2B contexts (Witell *et al.*, 2020). Our
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45 study also corroborates and extends the conceptual framework proposed by Voorhees *et al.*
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47 (2017). In particular, regarding B2B MOTs, more empirical research was needed to identify the
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49 influential factors of the B2B MOT and examine the role it plays in determining financial and
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51 behavioral customer outcomes. Our findings indicate that, despite the ever-evolving landscape
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53 of new technologies and the proliferation of digital touchpoints, particularly within B2B
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55 settings, human and physical touchpoints remain pivotal during an MOT. This underscores the
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57 enduring importance of personal interactions and tangible elements in the B2B context. Our
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3 study also elucidates that the customer's assessment of an MOT carries profound implications
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5 for the continuity of these relationships. Notably, the profitability and behavioral outcomes of
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7 B2B interactions are intrinsically linked to the way in which MOTs are perceived and
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9 experienced by the customer. This insight underscores the strategic importance of effectively
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11 managing and optimizing the MOT process to foster enduring and profitable B2B relationships.
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15 Another noteworthy contribution to the interactive marketing field is associated with
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17 how various touchpoints determine the customer assessment of MOTs. This research addresses
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19 calls that have been made to analyze touchpoints that have different natures (De Keyser *et al.*,
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21 2020), and to explore touchpoints across diverse channels (Lim *et al.*, 2023). Our study
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23 underscores the paramount significance of human touchpoints in shaping the evaluation of
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25 MOTs, particularly within the context of B2B customers. Notably, this finding aligns with prior
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27 research that has consistently emphasized the central role of employee interactions in B2B
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29 relationships. Interactions with employees have long been recognized as indispensable in
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31 nurturing and sustaining these relationships (e.g., Shi *et al.*, 2017). Through customer–
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33 employee touchpoints, bonds are created, and interpersonal connections prove to be vital during
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35 MOTs. As a result, our findings support the importance of human interactions in B2B contexts.
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40 Physical touchpoints also emerged as a significant factor. These findings are intriguing
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42 because they demonstrate that interactions involving physical elements have relevance for B2B
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44 customers. In the realm of B2C markets, the physical environment is becoming increasingly
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46 intertwined with the digital realm, and retailers are expected to offer in-store virtual
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48 touchpoints, incorporating technologies such as augmented reality and other smart innovations
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50 (Zimmermann *et al.*, 2023). Nevertheless, for B2B customers, our research suggests that
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52 physical surroundings are important in determining the evaluation of an MOT. Although digital
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54 touchpoints have gained prominence in the business-customer landscape (Kauffman and
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56 Pointer, 2022), our findings highlight that the physical environment remains significant,
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3 especially in critical customer–provider interactions such as MOTs. Digital channels could be
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5 more effective for routine tasks (Hallikainen et al., 2019); however, the present study highlights
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7 the critical importance of human and physical touchpoints during key MOTs. Our study
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9 therefore makes a substantial contribution to the multichannel literature by showing that all
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11 touchpoints significantly contribute to MOTs. Our study also highlights that despite the
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13 prevalence of digital touchpoints for routine and everyday interactions (Hallikainen *et al.*,
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15 2019), human and physical touchpoints maintain their primacy during MOTs.
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19 This study also contributes to the literature by focusing on the role played by MOTs in
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21 shaping customer outcomes. Further exploration was warranted to discern the specific impact
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23 of MOTs on profitability, especially given the considerable resources allocated by companies
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25 to manage customer–provider relationships. Moreover, our research extends beyond financial
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27 metrics to encompass behavioral outcomes, elucidating the significant influence of MOTs on
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29 customer retention and cross-buying behavior. By integrating both financial and behavioral
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31 customer outcomes within a unified framework, our study offers a comprehensive
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33 understanding of MOT consequences.
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37 The final contribution is associated with the dynamic nature of touchpoints and MOTs.
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39 Our findings underscore how touchpoints influence MOTs, subsequently shaping future
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41 customer outcomes. This dynamic interplay emphasizes the need for longitudinal research
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43 approaches, as advocated in prior literature (Witell *et al.*, 2020). Adopting a longitudinal
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45 perspective is essential for both theoretical insight and practical application, and provides a
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47 deeper understanding of MOT management and its impact on future customer–provider
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49 relationships. Such understanding carries profound implications for relationship stability and
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51 sustainability, and offers invaluable guidance for practitioners striving to optimize customer
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53 interactions. The next section elaborates on the current study’s managerial implications and
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55 recommendations for best practice.
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5.2. Managerial implications

In customer–provider relationships, MOTs have been a constant preoccupation for practitioners given the importance of these moments in determining the customer experience (Gartner, 2016). This is especially relevant for management, as managers can understand how and to what extent they can influence critical touchpoints. Therefore, our results have vital consequences for how providers can accurately manage MOTs and influence their possible impact.

First, managers should carefully identify the most relevant MOTs, and dedicate special attention to their design and management. Disruptions that may affect the business relationship are common, and MOTs may occur, yet they vary depending on the specific context at hand. Consequently, we urge practitioners to accurately identify MOTs so as to manage and improve them. Next, managers must keep track of how customers are evaluating MOTs, given the vital effect of these moments on relevant customer outcomes and the endurance of the business relationship. We recommend obtaining customer feedback after MOTs as, using these assessments, companies can accurately predict the continuity of the relationship.

Second, given its longitudinal approach, this study demonstrates that MOTs have a strong and enduring impact on the future of the customer–provider relationship. Our findings are vital for fully understanding the importance of MOTs and their impact in this regard. The findings are particularly relevant as managers are eager to identify methods for ensuring customer retention, promoting cross-buying behavior, and, ultimately, increasing profitability. MOTs have the potential to make or break the relationship; thus, we recommend that, in managing MOTs, practitioners keep in mind that the future of the relationship is at stake. For this reason, intensifying investment in MOT management is a fundamental recommendation.

Third, this research examines the impact of three touchpoint types—human, digital, and physical—across various channels, offering significant insights for resource allocation and

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3 interaction management. While digital channels are efficient for routine tasks (Hallikainen *et*
4 *al.*, 2019), this study underscores the importance of human and physical touchpoints in crucial
5 MOTs. Managers should prioritize these touchpoints for significant interactions, but can utilize
6 digital channels for less critical engagements. Despite the shift toward digital in recent years,
7 the value of physical interactions remains, especially with respect to important decisions. Some
8 digitally born corporations have recognized this relevance of physical environments, and have
9 started to open physical stores in response (e.g., Amazon; Gazzola *et al.*, 2022). Indeed, when
10 customers need to deal with something more important, they prefer to visit a physical location.
11 Nonetheless, all touchpoint types are crucial in shaping MOTs. Therefore, from an interactive
12 perspective, companies should ensure seamless integration across all interactions to enhance
13 the customer experience.

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28 Finally, given the proliferation of touchpoints, providers nowadays have at their disposal
29 increasingly more valuable data, obtained primarily through interactions with new
30 technologies. Managing large amounts of data represents both a challenge and an opportunity
31 for touchpoint management. Hence, a final recommendation is to employ artificial intelligence
32 and big data analytics (Gao and Liu, 2023) to successfully harness these data and derive new
33 opportunities for managing MOTs.

34 35 36 37 38 39 40 41 42 43 **6. Conclusions and future research**

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46 This research sheds light on the influence of MOTs in B2B settings, showing how other
47 touchpoints affect MOTs and ultimately customer outcomes. Adopting a longitudinal approach,
48 the study analyzed a large dataset of thousands of B2B customers across various industries,
49 providing valuable insights into the temporal impact of MOTs.

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55 However, no research is without limitations. To begin with, the study was developed
56 using data from insurance services. Although the sample was large and included B2B customers
57 from a wide range of industries and sectors, the choice of MOT was conditioned by the B2B
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3 experience with insurance services. Future studies could replicate this work across different
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5 B2B settings to gather a broader range of data. Additionally, there is a lack of longitudinal
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7 empirical evidence on MOTs in B2C contexts. Future research should also explore consumer
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9 markets to better understand how touchpoints influence MOTs and affect customer outcomes.
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12 Furthermore, this research focused on provider-controlled customer-provider
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14 touchpoints. However, some touchpoints are controlled by customers, business partners, or
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16 social channels (Lemon and Verhoef, 2016). Future studies should explore these various
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18 touchpoint categories and their impact on MOTs, particularly in complex B2B contexts
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20 involving multiple stakeholders and varied touchpoint ownership. Such research could also
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22 enrich the conceptual framework by incorporating additional variables.
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26 Finally, the use of different touchpoints and channels may be affected by the evolution
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28 of technology-enabled interactions (Gao and Liu, 2023). Future research could explore how
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30 these trends may change the ways in which businesses interact in favor of more digital
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32 touchpoints, or whether business customers still prefer to interact through human and physical
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34 touchpoints.
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37 To conclude, we believe that the findings of this study have the potential to open up a
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39 specific line of research regarding the complexities of MOT formation and role. We encourage
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41 other researchers to further pursue this critical topic, given its importance for the academic
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43 literature and practitioners alike.
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Figure 1
Proposed model

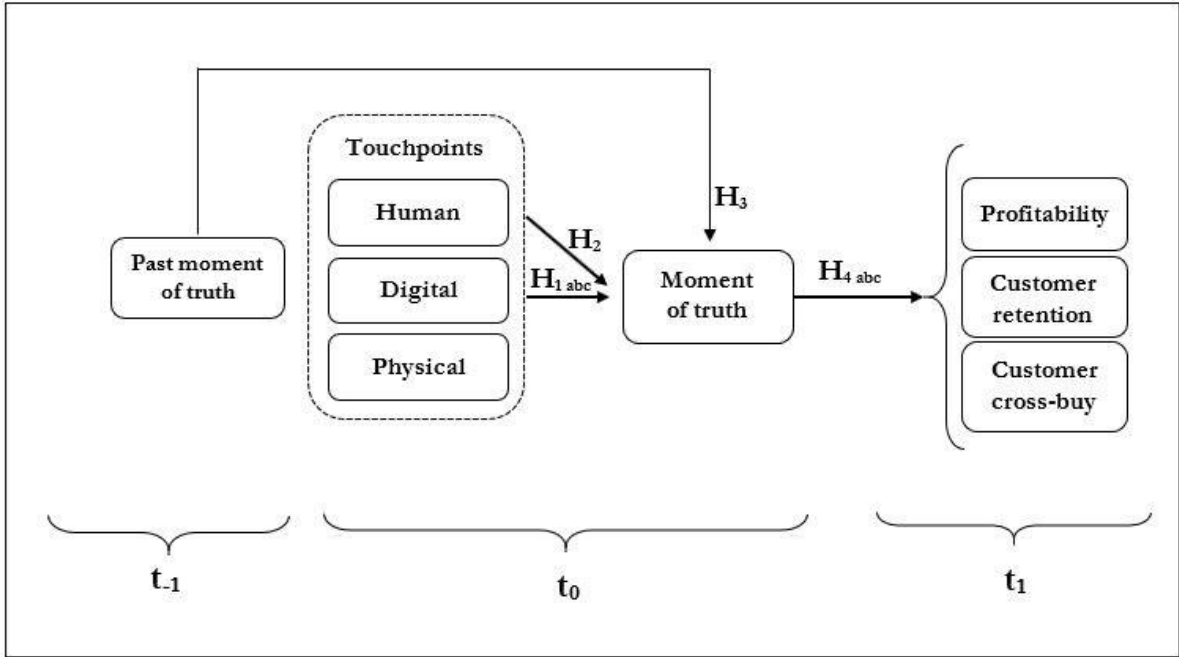


Table I

Empirical evidence on customer–provider touchpoints and MOTs

Study	Purpose	Touchpoints	MOT	Outcome variables	Longitudinal orientation	Study context	Main results
Aichner and Gruber (2017)	Identify customer–provider touchpoints to provide insights into improving customer satisfaction in a B2B context	A series of touchpoints classified into the following categories: human, product, service, communication, spatial, and electronic interactions	No distinction between specific MOTs, but it is stated that any touchpoint could be a MOT	Customer satisfaction	–	Case study of a B2B Italian printing house	Not all touchpoints have the same importance for customer satisfaction, and human touchpoints are the most relevant
Bacile (2020)	Analyze customer-to-customer interactions in digital environments in terms of dysfunctional dialog, such as online incivility	Customer-to-customer touchpoints related to online incivility	–	Customer-to-customer interactional justice (mediator), customer-perceived climate (mediator), sociability value, hedonic value, pragmatic value	–	Experiment based on a sample of 171 US subjects in the context of a restaurant	Online incivility of other customers negatively affects the perceptions of the digital service environment and the customer experience
Baxendale <i>et al.</i> (2015)	Determine the impact of a series of touchpoints on changes in brand consideration in different consumer categories	Touchpoint frequency and positivity for brand advertising, retailer advertising, in-store communications, word of mouth, peer observation, and traditional earned media	–	Change in brand consideration	One week between data collections in T0 and T1	Data collected in North America and Europe that included an initial survey, real-time experience tracking via mobile handset, and a final survey one week later from the initial one	Findings corroborate the impact of brand advertising, retailers, social effects, and third-party endorsement

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Cambra-Fierro et al. (2021)	Compare and analyze the short- and long-term impact of a series of customer-provider touchpoints on customer perceptions	Sales force, product, consulting, communication, tangibles, and standardized contacts	–	Firm expertise, service reliability, and service excellence	Comparison of short- versus long-term impact of touchpoints	Insurance services on a sample of more than 2,000 customers spanning over five years	Findings indicate discrepancies regards to the effect of touchpoints in the short and long term: touchpoints related to sales force and product are more important in determining long-term effects, whereas consulting and tangibles are only relevant in the short term
Delcourt et al. (2017)	Study how, during an emotionally charged service encounter, the customers' emotions and satisfaction with employee response are influenced by the employees' emotional and technical competencies	–	The MOT is an emotionally charged service encounter: a stimulus during the experiment depicting a customer involved in a situation when a service provider delivers bad news	Negative emotions and satisfaction with employee response	–	A video-based experiment in an airport check-in scenario illustrating an emotionally charged service encounter	Emotional and technical competencies are relevant in determining the customer experience in an emotionally charged service encounter
Hallikainen et al. (2019)	Identify different segments regarding their preference for digital touchpoints based on their technological readiness, internet use, and demographics	Digital touchpoints classified as functional touchpoints (e.g., email, website, search engine, and live chat), social touchpoints (e.g., social networking, photo content communities, and video content communities), and community touchpoints	–	–	–	Survey of 2,348 customers of companies operating in telecommunication services, information technology services, furniture solutions, workplace-related services, healthcare services, and security services	Findings reveal four segments (anti-digital, anti-social media, majority, and digital channel enthusiasts), and the differences across segments are mostly related to technological readiness; functional touchpoints are the most

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(e.g., discussion, forums,
and blogs)

relevant touchpoints for
all segments

**Ieva and
Ziliani (2018)**

Analyze the role of
a series of
customer–provider
touchpoints in
determining
customer loyalty
intentions

Touchpoint reach,
positivity, and frequency
for 24 customer–provider
touchpoints (e.g., website,
physical store, word of
mouth, advertising, and
customer service)

–

Loyalty intentions

–

A survey conducted in
Italy using the Nielsen
consumer panel on a
sample of 5,794
consumers

Touchpoint reach plays an
important role in
determining customer
loyalty intentions for
some touchpoints; when
controlling for touchpoint
frequency, positivity was
also significant for some
touchpoints

**Kranzbühler
et al. (2019)**

Examine the effect
of outsourced
touchpoints on
brand evaluations

Satisfying touchpoints,
dissatisfying touchpoints,
and outsourced touchpoints

–

Association of
focal firm with
touchpoint,
attribution of
touchpoint to
focal firm, and
evaluation of
focal firm

–

Various studies
involving field data
and a series of
experiments in the
context of an energy
provider and a tailor
service

Findings reveal that
companies can employ
outsourcing to reduce the
negative effect of
dissatisfying touchpoints,
as consumers do not
associate them with the
focal brand

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Determine the effects of attribute-based scores and critical incidents on assessing service quality in a B2B service context and their impact on satisfaction and trust

Odekerken-Schroeder et al. (2000)

–

MOT in the form of positive and negative critical incidents employed for assessing incident-based service quality

Satisfaction and trust

–

A survey using a sample of 1,844 B2B customers of a Dutch office equipment manufacturer

Results indicate that negative incidents have a stronger influence on satisfaction compared with positive experiences; no impact was found regarding the influence of critical incidents on the level of trust

Compare the role of service experience and service quality in determining immediate satisfaction and perceived value, as well as subsequent customer outcomes such as loyalty and word of mouth in a B2B setting

Roy et al. (2019)

–

MOT as a dimension of service experience

Perceived value (mediator), satisfaction (mediator), loyalty, and positive word of mouth

–

Three surveys with a sample of 626 B2B customers in the context of financial consultancy services

Findings corroborate that service experience presents a stronger influence on customer outcomes compared to service quality

Identify and analyze the effect of brand touchpoints on two relational outcomes (i.e., relationship quality and word of mouth)

Sultan (2018)

A series of touchpoints classified based on the customer experience stages (i.e., pre-touch, in-touch, post-touch, and service failure) such as gathering information, employee interaction, product conformance, and product easiness

Touchpoints from the service failure stage such as solutions, service recovery, and compensation for service failure

Relationship quality and word of mouth

–

Various studies with qualitative and quantitative approaches, where focus group sessions are complemented by surveys in the telecom industry in Kuwait

Touchpoints from each customer experience stage have a significant impact on relationship quality and word of mouth

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Current study	Analyze the impact of customer-provider touchpoints on MOTs, as well as the effect of MOTs on financial and behavioral customer outcomes	Human, physical, and digital touchpoints	Customers' MOT evaluation	Profitability, customer retention, and customer cross-buy	The impact in time of the MOT on future customer outcomes	B2B insurance services using a panel dataset of 2,970 B2B customers over a five-year period	Results demonstrate that human, physical, and digital touchpoints influence MOTs, which, in turn, determine future customer outcomes
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Table II

Operationalization of variables

Variable	Operationalization	References	Mean	Min	Max	SD
Human touchpoint	Customer <i>i</i> 's overall evaluation of the interaction with the employees of the service provider	Cambra-Fierro <i>et al.</i> (2021b), De Keyser <i>et al.</i> (2020), Gao <i>et al.</i> (2021), and Sultan (2018)	8.28	0	10	1.51
Digital touchpoint	Customer <i>i</i> 's overall evaluation of digital interactions	Bolton <i>et al.</i> (2018), De Keyser <i>et al.</i> (2020), Stein and Ramaseshan (2016), and Wagner <i>et al.</i> (2020)	8.54	2	10	1.34
Physical touchpoint	Customer <i>i</i> 's overall evaluation of interactions with physical elements	Bolton <i>et al.</i> (2018), Cambra-Fierro <i>et al.</i> (2021b), De Keyser <i>et al.</i> (2020), and Gao <i>et al.</i> (2021)	8.36	0	10	1.47
MOT	Customer <i>i</i> 's evaluation of a critical episode between a customer and a provider during the customer journey; given the context of this research, the MOT is represented by the claim management	Lemon and Verhoef (2016) and Voorhees <i>et al.</i> (2017)	8.48	3	10	1.28
Profitability	Difference between revenues earned from customer <i>i</i> and the cost associated with the customer <i>i</i> during <i>t</i> : Profitability = Revenues – (Direct cost + Indirect cost + Business development)	Pfeifer <i>et al.</i> (2005)	6,300.61	-465,617.2	2,013,852	69,262.94

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Customer retention	Customer i 's decision to remain with the current provider at the time t (yes: 1; no: 0), yearly measured	Cambra-Fierro <i>et al.</i> (2021a) and Verhoef (2003)	0.89	0	1	0.31
Customer cross-buy	Number of product categories purchased from the same provider	Kumar <i>et al.</i> (2008)	6.76	1	55	7.87

Table III

Estimation results

Independent variables	Dependent variables			
	MOT (t_0)	Profitability (t_1)	Customer retention (t_1)	Customer cross-buy (t_1)
<i>Random effects</i>				
Intercept	1.0984***	2802.69**	—	7.3929***
MOT (t_{-1})	0.3223***	—	—	—
Human touchpoint (t_0)	0.2467***	—	—	—
Digital touchpoint (t_0)	0.1253**	—	—	—
Physical touchpoint (t_0)	0.1823**	—	—	—
MOT (t_0)	—	0.2043***	—	0.3381**
<i>GMM</i>				
Intercept	0.0563***	4020.04***	—	3.6622***
MOT (t_{-1})	0.3462***	—	—	—
Human touchpoint (t_0)	0.3082***	—	—	—
Digital touchpoint (t_0)	0.1539**	—	—	—
Physical touchpoint (t_0)	0.1926*	—	—	—
MOT (t_0)	—	0.1866***	—	0.2112***
<i>Logit</i>				
Intercept	—	—	0.3401***	—
MOT (t_0)	—	—	0.0106*	—
<i>Probit</i>				
Intercept	—	—	0.2159***	—
MOT (t_0)	—	—	0.0137**	—

Note: *** $p < .01$, ** $p < .05$, * $p < .10$.

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3 **Table IV**

4 Summary of theoretical contributions and managerial implications
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8 **Main theoretical contributions**
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- Pioneering study that focuses on a critical topic in interactive marketing where more research was needed in B2B settings, as extant research usually focused on consumer markets
 - Reveals which touchpoints are more important in determining MOT evaluation for B2B customers and demonstrating the relevance of human touchpoints, followed by physical and digital touchpoints
 - Demonstrates the impact of MOTs on profitability and behavioral outcomes such as customer retention and cross-buy, thus advancing the understanding of customer-provider relationships in B2B settings
 - Considers the dynamic nature of touchpoints and MOTs and adopts a longitudinal perspective, which is especially relevant given the need for more longitudinal studies on the effect of MOTs on future customer outcomes

20 **Main managerial implications**
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- Identify and properly monitor customer MOT evaluation given the specificities of their customer journey, considering the vital impact MOTs have on profitability and behavioral customer outcomes
 - Recommendation to focus on managing MOTs due to their potential for causing disruptions; proper management of these critical touchpoints can ensure the continuity of the relationship regarding customer retention, cross-buy, and, ultimately, future profitability
 - Implications for resource allocation regarding touchpoints; recommendation to focus and invest, first and foremost, in the human touchpoint given its greater impact on the evaluation of MOTs compared with other touchpoints, yet without overlooking the physical and digital touchpoints, which could help managers to redefine and further organize the way they interact with customers
 - Recommendation to employ customer relationship management systems and big data analytics to successfully harness data from all touchpoints, as managing large amounts of data can be both a challenge and an opportunity for management