The micro customer journey: Extending the concept of customer experience

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Abstract

Customers increasingly seek exclusivity. At the same time, organisations have less control over the delivery of experiences and compete on customer experience (CX) management. In this context, an in-depth understanding of micro-experiences is crucial. It involves conceiving each interaction between customer and company as part of a collection of micro-experiences. The concepts related to customer experience management (CEM) can be applied to each of these micro-experiences to gain greater focus, knowledge, operability, control and impact from each of a customer's experiences. The analysis of micro-experiences can lead to greater efficiency in delivering on a company's objectives by focusing on the interactions that customers deem important. This research centres on the interactions of customers with a technology company's technical service. Analysis of 109,702 customer surveys enables in-depth investigation of these interactions by identifying and detailing each micro-experience and monitoring the related performance indicators. The results show that micro-experiences have a significant influence on satisfaction and recommendations. They are associated negatively with waiting time and positively with talk time and query resolution. The findings expand current approaches to CEM. Given that research to date has focused on CX as a macro-level concept, this study provides a novel and enriching approach to CEM.

Keywords: micro-experiences, micro customer journey, key moments of truth, transactional measurements

JEL Classification: M30, M31

1 INTRODUCTION

Many companies around the world share a common challenge: how to grow sustainably in an increasingly competitive and saturated market. In addition to competing with each other, they face disruption from agile digital companies that offer innovative and customised solutions. However, growth cannot focus solely on economic factors (Peng, 2023) because organisational innovation is a key determinant of success (Nicolescu et al., 2024). In this new environment, customer experience (CX) represents a major battleground between organisations (Gentil et al., 2007; Gallardo et al., 2023; Molinillo et al., 2022; Pine & Gilmore, 1998; Shaw & Ivens, 2002; Verhoef, 2003). CX refers to the thoughts, emotions and evaluations that result from contact between customer and company (Goode et al., 2010). Fostering positive CX can be extremely successful. For example, studies have shown that implementing a strategy focused on improving CX can double growth (McKinsey & Company, 2023).

To channel this CX effectively, customer experience management (CEM) is important. CEM relies on using disciplines such as brand promise and active customer listening to improve an organisation's interactions, products and services. It also involves evaluating the performance

of these improvements and the way in which customers perceive any changes that are made. Despite abundant literature on CEM and the different disciplines that shape it, there seems to be a lack of consideration of the fact that very few of the numerous interactions that occur between customers and organisations are in fact controlled by the organisation (Leva & Ziliani, 2018; Payne et al., 2017). This fact has given rise to a new approach, which focuses on so-called *micro-experiences*. This approach is based on the idea that organisations have limited control over their customer interactions (Verhoef et al., 2009) and recognises the importance of CX in competitive differentiation. It challenges the notion of analysing interactions between companies and their customers from a detailed and precise perspective, conceiving the elements and disciplines that constitute the concept of micro-experiences in a different way (Tuunanen et al., 2024).

Based on the premise that customer–company relations are highly sensitive in the service sector (Kerde, 2024), this study addresses the gap in the literature by examining customer management. It does so by evaluating the micro-experiences that affect customer satisfaction and therefore increase service recommendations. This paper draws on concepts such as the micro customer journey and micro-experiences. It also uses measurement methods based on transactional indicators such as the transactional net promoter score (Reichheld & Markey, 2011; Temkin, 2014; Whitlark & Roads, 2011), customer satisfaction (Szymanski & Henard, 2001), first call resolution, average wait time, and average handle time. From this perspective, this paper seeks to show whether customers' micro-experiences with a technology company when interacting with its technical service have different influences on their satisfaction and perceived experience before, during and after these interactions.

This paper has five further sections. Section 2 explores the existing literature on the concept of CX, its operationalisation in organisations and its measurement using relational and transactional indicators. Section 3 describes the methodology used to analyse the factors influencing CX and their relationships with each other. Section 4 presents the results. Section 5 then discusses these results. Finally, Section 6 details the conclusions, implications, limitations and future lines of research related to the findings.

2 THEORETICAL BACKGROUND

2.1. Operationalisation of the customer experience through the customer journey

Empirical research reflects the interest of companies, researchers and scholars in understanding CX, which is defined as "all the thoughts, emotions and appraisals that occur during or as a result of an encounter" (Goode et al., 2010, p. 276). The strategic importance of CX for organisations lies in the impact of perceived improved CX on both growth (Bolton et al., 2004; Wetzels & Wetzels, 2023) and customer satisfaction. Customer satisfaction is the difference between customer expectations and actual perceived performance. Thus, a positive customer experience can lead to high retention and loyalty with a company, which then becomes a key driver of revenue growth (Vijayakumar, 2023).

The empirical research shows that improving customer satisfaction (Anderson et al., 2004; Bolton & Drew, 1991; Gupta & Zeithaml, 2006) and customer experience (Baehre et al., 2022; Bloemer & De Ruyter, 1999; Bolton, 1998; Bolton et al., 2004; Verhoef, 2003) has a positive influence on customer behaviour and loyalty to an organisation. Hence, organisations need information to better understand customer needs (Abumalloh, 2024) and to be able to manage customer emotions and knowledge when customers interact at the different points of contact in a company's offering (Gallardo et al., 2023). Therefore, the design and delivery of memorable

experiences in the interactions that customers consider relevant has become a crucial aspect defining the winners and losers of the competition that occurs between companies.

Given the numerous complex touch points, channels and media that organisations make available to customers (Verhoef et al., 2009), the customer journey has become a fundamental tool to identify critical moments in the relationship and to detect the most important touchpoints for the CX (Rawson et al., 2013). The underlying belief is that designing positive experiences results in improved organisational performance (e.g. through better conversion rates and increased customer loyalty and recommendations).

2.2. Customer–company interactions

The sum of the experiences customers have at different points of contact (touchpoints or encounters between customer and organisation) influences their opinion about the organisation (Weidig et al., 2024) and therefore their behaviour (Clatworthy, 2011). In addition, customers continuously adjust their perceptions of a brand at each touchpoint they experience (Meyer & Schwager, 2007). To analyse the interactions of customers with an organisation and to design the type of experience that customers wish to receive, the customer journey is conceived as a sequence of three stages: before, during and after purchase (Howard & Sheth 1969; Neslin et al., 2006; Pucinelli et al., 2009). These three stages define the customer journey (Purmonen et al., 2023) and make it more manageable, improving its practical applicability (Schmitt, 2019).

The complexity of the offer available to customers, the phenomenon of outsourcing, the proliferation of contact points resulting from digitalisation (Pantano & Viassone, 2015) and the greater involvement of customers in relationship models have gradually reduced organisations' control of their customers. These trends have led to greater interest and investment in the contact points that make all the difference not only from a competitive point of view but also from the perspective of customers. These contact points are known as the *key moments of truth*, or KMOTS for short (Leva & Ziliani, 2018; Payne et al., 2017). They are defined as the critical moments when customers interact with a brand. Customers' perceptions of KMOTS largely condition their future behaviour with the company.

2.3. The micro customer journey of the technical service key moments of truth

This study focuses on the KMOT corresponding to technical service interactions – the moment when customers have a query, concern or incident with their software and require technical assistance. Such interactions form the focus of this research because customer service is a critical part of business strategy. It is a key lever of differentiation between organisations' offerings (Drift et al., 2018; González & Gidumal, 2017; Sheth et al., 2023) because of its capacity to affect customer satisfaction and behaviour.

In this study, three micro-experiences were identified as part of the micro customer journey in technology company technical service interactions: (i) service waiting time, (ii) conversation time and (iii) query resolution at first contact. Each was assigned a performance indicator, respectively, (i) average wait time (AWT), (ii) average handle time (AHT) and (iii) first call resolution (FCR). These indicators were chosen to verify that the different stages of the micro customer journey affect evaluations of customer satisfaction (CSAT) and subsequent recommendations in the form of the transactional net promoter score (tNPS).
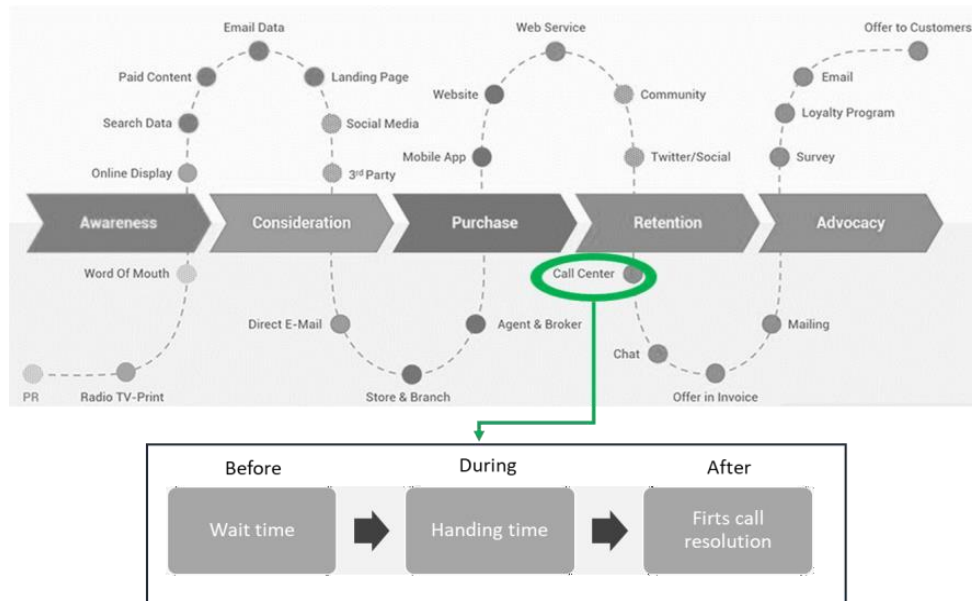
Fig. 1 – Micro-experiences that make up the micro customer journey corresponding to the "I called technical service" interaction. Source: Authors.

2.4. The micro-experience of wait time

The time spent waiting for service was measured by the AWT indicator and was identified as a key micro-experience for analysis. AWT is "the time from which a customer is ready to receive the service until the service commences" (Taylor, 1994, p. 56). When customers call technical service, they expect to receive a quick and effective response. If they have to wait for too long to talk to a technical service agent, they may feel frustrated and dissatisfied (Zhang & Shao, 2019; Zhang & Zhang, 2023) and may perceive the service as low quality (Benevento et al., 2023; Chebat & Filiatrault, 1993; Garcia et al., 2012; Gopalakrishna & Mummalaneni, 1993). In this case, customers may perceive that their problem is not important, which may influence their decisions regarding doing business with the organisation in the future. On the contrary, if customers feel that they have been able to talk to a technical agent promptly, then they conclude that the company is interested in their query. This conclusion may increase their satisfaction and trust, which then influences their behaviour (De Vries et al., 2018; Graham, 1981; Ilk & Shang, 2022; Jones & Dent, 1994; Taylor, 1994).

The optimal management of waiting times in service provision avoids the negative effects of delays and other psychological factors on perceptions of service quality and customer satisfaction. It is therefore of substantial interest (Sridhar, 1998). Classical approaches such as queue management theory (Dshalalow, 2023; Erlang, 1909; Ferreira et al., 2011; Sztrik, 2010) explain that queues form when the demand for a service exceeds the capacity to provide it. This backlog primarily occurs because of the difficulty of accurately predicting the arrival pattern of customers and the time required to provide the service. Furthermore, there is a reluctance to overprovide because an excess of service capacity entails additional costs and underuse of the service. Conversely, a lack of service capacity leads to long queues for the service, increasing the probability of abandonment. Queuing theory suggests that an economic balance should be sought between the cost of the service and the costs associated with waiting for it (Serrano et al., 2023). The economic theory of congestion explains waiting in terms of micro-experiences. In summary, congestion can occur when lines are busy, more calls are received, and the capacity of available agents is exceeded. As a result, customers are forced to wait longer when they call,

leading to higher call abandonment rates and a decrease in service quality. Strategic management practice addresses these issues by introducing effective call routing policies and optimal resource allocation to mitigate congestion and ensure higher-quality customer interactions. All these considerations lead to the following working hypothesis:

H1a: The micro-experience of service waiting times (measured in terms of AWT) negatively influences customer satisfaction (CSAT).

2.5. The micro-experience of call duration

Call duration is measured by AHT. Its relationship with service desk satisfaction (CSAT) is complex and varies depending on the specific customer situation and problem. A long talk time may indicate that the service agent is not handling the problem effectively and is having difficulty providing an adequate solution (FCR). If the customer perceives that the technical service agent is not providing effective attention to the problem, prolonged talk time may increase customer frustration and decrease overall satisfaction with the service (Chicu et al., 2019). Conversely, a lengthy conversation may also indicate that the service agent is providing detailed and thorough attention to the customer's problem because if the problem is complex, it may require time to explain and solve effectively. In this case, the customer may be satisfied with the attention received and the resolution of the problem, even if the conversation time is longer than normal. Customer service agents have no reason to continue talking to callers unless they are trying to resolve their problems (Feinberg et al., 2002).

From an organisational point of view, theories such as transaction cost economics (Coase, 1995; Hasanah, 2024) and agency theory (Flayyih & Khiari, 2023) are instrumental in achieving adequate call duration management in a technical service. Specifically, transaction cost economics emphasises that the goal of a call centre is to minimise transaction costs by serving more customers in less time with fewer resources. In contrast, agency theory proposes that the average conversation time can be influenced by establishing incentives and management controls that align the interests of the technical agents with operational efficiency. These arguments lead to the following working hypothesis:

H1b: The micro-experience of talk time (AHT) positively influences customer satisfaction (CSAT).

2.6. The micro-experience of first contact resolution

One of the metrics used to measure call centre effectiveness is FCR, which refers to whether customers perceive that the answer provided by the technical service agent solves their query. A high FCR represents a large number of customers who called, saved time and felt low levels of frustration and dissatisfaction by not having to make additional calls. FCR is positively related to CSAT and is in fact one of the most influential indicators of satisfaction (Cheng et al., 2008). Customers whose problem is successfully resolved in the first contact are expected to have a higher satisfaction rate than those who require multiple interactions to resolve their problem (Dogan, 2023; Rane et al., 2023). This assertion is supported by service quality theory, which focuses on the provision of high-quality service as a critical element of an organisation's success. This theory is based on the premise that service quality influences customer satisfaction, customer loyalty and, ultimately, company performance (Brantevica, 2018). In view of this approach, the following working hypothesis is proposed:

H1c: The micro-experience of query resolution (FCR) positively influences customer satisfaction (CSAT).

2.7. Customer satisfaction (CSAT) and recommendations (tNPS) as transactional measures of perception and behaviour

Measuring customer satisfaction has become standard practice within organisations. Although most companies have rich data on their customers and their customers' behaviour, they are not always able to use these data to better understand the customer journey. Many companies use a top-down approach, employing indicators such as the net promoter score (NPS; Reicheld, 2003), the customer effort score (CES; Dixon et al., 2010) and CSAT (Szymanski & Henard, 2001). However, this relational approach is not enough. It must be complemented by other measures that reflect both the perception and the performance of the interactions that are relevant to customers. This view gives rise to the bottom-up approach to measurement, which results in transactional measures (Reicheld, 2011).

The literature reports a positive relationship between customer satisfaction measured as CSAT and customer recommendations measured as tNPS, suggesting that improving customer satisfaction can also improve recommendations and word-of-mouth associated with a brand (Baquero, 2011; Schneider et al., 2008). Therefore, customers who are highly satisfied with their service experience are expected to be more likely to recommend the brand to their friends, family and colleagues. As posited in the previous hypotheses, AWT, AHT and FCR affect customer satisfaction and quality of service associated with a query.

The theory of long-term customer value, which is built on principles such as the importance of customers, their needs and their expectations, suggests that organisations should focus on creating and maintaining strong relationships with customers (Lee, 2023). It suggests that companies should invest in the interactions that are relevant to their customers, based on the data needed to better understand customers and to be able to tailor and personalise the experiences they want to receive (Parvatiyar & Sheth, 2001). Similarly, customer satisfaction theory highlights the idea that when customer expectations are met or exceeded, customers are more willing to continue to be customers and promoters of the company. Improving customer satisfaction is a key objective for companies because it leads to stronger relationships and a better reputation (Gao et al., 2023; Oliver, 1999). In view of these arguments, the following working hypothesis is proposed:

H2: Customers' perceived satisfaction from micro-experiences before, during and after contact positively influences the willingness to recommend the company (tNPS).

FCR is a key metric in measuring technical service performance and customers' perceptions of that service. When customers' queries are resolved in the first instance, they are more likely to become promoters of the company and therefore recommend it to other customers (Leva & Ziliani, 2018). The reason is that first instance resolution prevents the customer from having to contact the organisation again, which can lead to customer frustration. Improving FCR is positively linked to tNPS because customers have had their issues solved efficiently, which increases the probability that they will recommend the company. In view of these arguments, the following working hypothesis is proposed:

H3: Consultation resolution (FCR) positively influences service recommendation (tNPS).
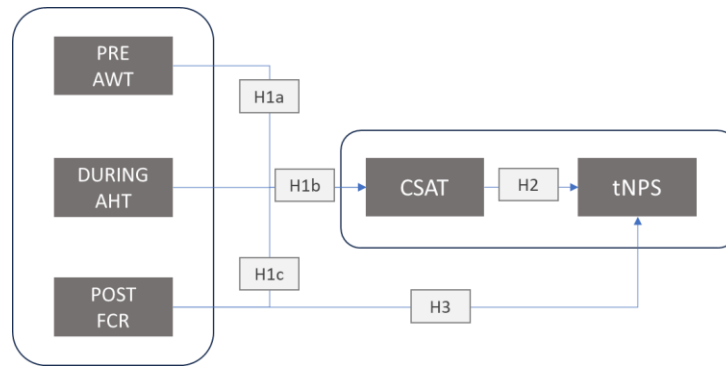
Fig. 2 – Proposed model. Source: Authors.

3 RESEARCH OBJECTIVE, METHODOLOGY AND DATA

This paper analyses 109,702 customer evaluation surveys on the technical service offered by a leading B2B technology company. To guarantee the anonymity of the company and the confidentiality of customers' personal data, unique identifiers are used instead of the names of the customers and company. The data correspond to all surveys received in the last quarter of 2021, as well as data on the performance of these calls. Of the overall sample, 32% of customers are commercial service companies, and 10% are legal service companies.

Data on customer perceptions of the service were collected by administering a survey at the end of the service without interrupting the call. As soon as customers were connected to the technical service, the interactive voice response system informed them that they could take the evaluation survey once the call had ended. The questions included in this evaluation survey are shown in Tab. 1.

Tab. 1 – Questions in the service evaluation survey. Source: Authors.

Q1	Based on your recent experience with our technical service, would you recommend our company to a family member, friend or acquaintance?
Q2	How satisfied are you with the technical service you just received?
Q3	Has it taken more than one call to our technical service to resolve your query?

All data on call performance (e.g. AWT and AHT) were gathered from the information available in the company's corporate relationship management (CRM) tool. The variables are described in Tab. 2.

Tab. 2 – Description of variables used in the study. Source: Authors.

Indicator	Description	Calculation	Supporting literature
NPS	Introduced by Frederick F. Reichheld in 2003 to measure customer loyalty and recommendations based on customers' experiences with a company and to help predict a company's future growth through improved customer experience	Scale from 0 to 10, based on a customer's likelihood to recommend the company; customers categorised as detractors (0–6), passives (7–8) or promoters (9–10); calculated by subtracting the percentage of detractors from the percentage of promoters	Reichheld (2003) Keininghan et al. (2007, 2008) Temkin, (2014) Bueno et al. (2019) Baehre et al. (2022)
CSAT	Customer satisfaction with a company or its products and services measured as an average score	Values ranging from 0 (*very dissatisfied*) to 10 (*very satisfied*), taking the arithmetic mean	Churchill & Surprenant (1982) Szymanski & Henard (2001) Otto et al. (2020)
FCR	Total number of cases completely resolved during a customer's initial contact	Customers asked directly to give a yes/no response about the resolution of their case (Q3)	Cheng et al. (2008) Leva & Ziliani (2018) Dogan (2023)
AWT	Average time a call remains in the queue until an agent answers it	Total of all waiting times divided by the number of calls on hold for the measured period	Taylor (1994) Zhang & Shao (2019)
AHT	Average time a customer service agent spends in an interaction with a customer, from the start to the end of the call	Measured in seconds as the time the agent spends on the call with the customer plus any additional time dedicated to administrative or follow-up tasks after the call has ended	Feinberg et al. (2002) Chicu et al. (2019)

Source: Authors.

4 RESULTS AND DISCUSSION

The proposed model was analysed using structural equation modelling. This method enables testing of causal relationships between dependent and independent variables simultaneously. The statistical software EQS 6.4 was used for the analysis, and the robust maximum likelihood (MLR) method was applied to account for the missing values for some variables. The following equations form the basis of the analyses discussed in this section. These equations were used to test the hypotheses proposed in the theoretical section.

$$(1) \quad CSAT_i = \beta_0 + \beta_1 \, AWT_i + \beta_2 \, AHT_i + \beta_3 \, FCR_i + \varepsilon_i$$

$$(2) \quad TNPS_i = \beta_0 + \beta_1 \, CSAT_i + \beta_2 \, FCR_i + \varepsilon_i$$

Tab. 3 – Results of hierarchical linear regression analysis: Regression coefficients (t value). Source: Authors.

Independent variable	(1) Dependent variable: CSAT	(2) Dependent variable: tNPS	Mean (SD) or % independent var.
Constant	8.499 (471.863)***	3.865 (116.780)***	
AWT	-0.011 (-3.029)**		161.74 (260.780)
AHT	0.020 (5.607)***		619.52 (590.257)
FCR	0.205 (56.157)***	0.178 (55.114)***	86% (solved)
CSAT		0.440 (136.018)***	9.24 (1.690)
VIF($\leq$)	1.035	1.043	
R^2	0.042	0.257	
F	1076.323	12814.954	
Sig. F	0.000	0.000	

Notes: AWT = average wait time; AHT = average handle time; FCR = first call resolution; CSAT = customer satisfaction; tNPS = transactional net promoter score. VIF = variance inflation factor. VIF > 4 indicates possible multicollinearity. R^2 = R squared, a statistical measure that represents the proportion of the variance explained. F = F value. If the significance associated with the F value is less than 0.05, then the independent variables reliably predict the dependent variable. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$. tNPS mean (SD) = 9.02 (1.75).

The results of the analysis in Tab. 3 show that customer satisfaction with the service is negatively associated with the micro-experience of waiting (-0.011) and positively associated with the micro-experience of conversation time (0.020) and the micro-experience of query resolution (0.205). The results therefore support hypotheses H1a, H1b and H1c. The antecedents of the customer's willingness to recommend are determined by customer satisfaction as a result of micro-experiences before, during and after interaction (0.440) and query resolution (0.178). Therefore, the results support hypotheses H2 and H3. Fig. 3 visually illustrates the results. The data confirm that the model in this study is suitable.
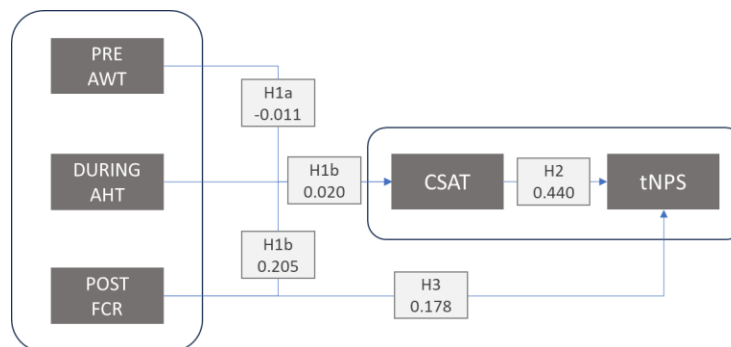

Fig. 3 – Results for the proposed model. Source: Authors.

Perceptions of corporate behaviour are not static (García-Sanchez et al., 2024). Therefore, one of the main challenges for service organisations is to ensure customer satisfaction, which can be influenced by various factors such as service quality, price and waiting time (Zeithaml et al., 2022). The results of the analysis indicate that there is a negative relationship between AWT and CSAT, implying that longer waiting times lead to lower satisfaction levels, and vice versa.

This finding supports previous research showing that waiting time is a critical determinant of customer satisfaction and loyalty in various service contexts such as banking, healthcare and call centres (Davis & Heineke, 2022; Maister, 2022; Tarasi et al., 2022).

The negative impact of waiting time on customer satisfaction can be explained by expectation confirmation theory (Hossain & Quaddus 2012). This theory suggests that customers compare their expectations about service performance with their actual perceptions. If the two do not match, customers experience dissatisfaction (Oliver, 2022). Therefore, if customers expect a short waiting time and encounter a long one, they may perceive the service as poor and become dissatisfied. Queuing theory identifies the factors that influence customer expectations such as queue length, variability of service time, fairness of service delivery and availability of information and feedback (Larson, 2022). According to queuing theory, customers can tolerate longer waiting times if they perceive them as fair, predictable and justified by service quality. A limitation of queuing theory in relation to the purpose of this study is that it treats customers as independent entities who enter and wait their turn without regard to the importance or priority of resolving their query. In this case, the levels of prioritisation, expectations and importance for customers are not considered, despite being crucial for a good customer experience.

This discussion implies that reducing waiting times is an important operational goal that has strategic implications for service organisations. By minimising waiting times, service organisations can enhance customer satisfaction, loyalty and retention, while improving their reputation and competitiveness. Therefore, service managers should implement effective strategies to manage waiting times. Such strategies might include optimising service capacity and demand, providing accurate and timely information and feedback to customers and offering alternative service options or compensation for long waits. Therefore, H1a is confirmed: The micro-experience of service waiting times (AWT) has a negative influence on satisfaction (CSAT).

The results of the analysis reveal a positive relationship between the micro-experience of call duration and customer satisfaction, implying that longer call durations lead to a higher level of satisfaction among users of this technical service. However, the relationship between talk time (AHT) and service desk satisfaction (CSAT) is complex and depends on many factors. For example, the complexity of the customer's problem, the efficiency of the service desk agent and external factors may all affect the length of calls. In terms of efficiency, the literature questions whether reducing AHT harms CSAT. Some scholars argue that lower AHT may increase CSAT by providing quick, concise and efficient responses to queries (Jaiswal, 2008). However, other studies have shown the opposite relationship. Namely, an excessive interest on the part of organisations in reducing the time of customer calls can have a negative effect because customers perceive a lack of empathy and personalisation, which lowers CSAT. The relationship between AHT and CSAT may also vary according to the complexity of customer queries. Some studies suggest that lower AHT may be more beneficial for simple queries, where customers value a quick response (De Castro et al., 2019). Conversely, for more complex queries that take more time to resolve, reducing AHT may lead to incomplete responses and thus lower CSAT. In the context of this study, which focuses on the technical service of a technology company, the queries raised by customers are often complex. Finally, a higher AHT can be caused by technological incidents associated with the quality of communication. In such cases, an increase in AHT will lead to a decrease in CSAT (Chicu et al., 2016).

Applying agency theory in the case of the service considered in this study presents unique challenges. Rapid technological evolution, constant updates of supported applications, the diversity of available channels and the wide range of possible technical issues mean that highly trained and up-to-date technicians are needed. In this context, continuous training is

fundamental to address these challenges. Such training can ensure that agents have the necessary skills to provide a high-quality service.

Based on the existing literature, the relationship between AHT and CSAT may vary according to industry and type of service, as well as other variables related to quality of communication. The literature identifies classical approaches such as equity theory (Adams, 1963) and transaction cost economics (Coase, 1995) that can be used to explain the relationship between the two concepts. Equity theory relates to perceptions of fairness in relationships, whereas transaction cost economics refers to the costs associated with conducting transactions. Perceptions of fairness can influence transaction costs by affecting satisfaction and cooperation in work and organisational relationships. The results of the study imply that the micro-experience of call time (AHT) positively influences customer satisfaction (CSAT). Therefore, H1b is confirmed.

Regarding the relationship between FCR and CSAT, the academic literature is more conclusive, with most studies reporting a positive relationship. However, there are some nuances in this relationship such as the complexity of the query. In such cases, query resolution in the first call is a secondary indicator for customers, who may place more value on the complete resolution of their query, even if multiple interactions (in this case, calls) are needed (Langley et al., 2006). This idea corresponds to two-factor theory, proposed by the psychologist Herzberg (1987). According to this theory, several factors influence customer satisfaction. These can be grouped into two categories: motivators and hygiene factors. These hygiene factors refer to the basic elements that every customer expects to receive from a product or service to avoid dissatisfaction. Such factors are fundamental to meet customers' minimum expectations. Hygiene factors are also at play in the relationship between customer and technical service, representing the resolution of customer queries. This idea is based on the premise that customers who contact technical service expect their queries to be dealt with and resolved efficiently. Thus, the micro-experience of FCR can be considered a hygiene factor, whereby customers expect a positive outcome following an interaction with the technical service. Hence, there is a positive relationship between FCR and CSAT, and hypothesis H1c is confirmed.

Regarding the relationship between satisfaction and recommendations, which were measured as CSAT and tNPS, respectively, other factors besides hygiene factors come into play. Within the framework of two-factor theory, these other factors are motivators (Herzberg, 1987). Motivators are aspects that generate additional satisfaction above what was previously expected. They are responsible for superior CX. This superior CX leads to greater loyalty and, in general, positive customer behaviour towards the organisation. Positive customer behaviour is motivated by factors such as the personalisation of interactions, unexpected added value, feeling listened to, valued and special, and all factors that underpin the feeling of a strong and trusting relationship between customer and company. Two-factor theory supports and confirms the relationship between satisfaction and recommendations proposed in H2. It relates loyalty and recommendation behaviours to motivational factors that improve CX. Therefore, although the literature reports a perfect relationship between satisfaction and recommendation (in terms of NPS), a positive but moderate relationship is found in the present study. Furthermore, although satisfaction is usually based on customer perceptions of the performance of an organisation's hygiene factors, this study examines the improvement of customer experience through the motivational factors of personalisation, surprise and adding value to the interaction.

5   CONCLUSIONS

This study addresses certain research gaps related to customer management through the evaluation of micro-experiences that improve customer satisfaction and thus increase service recommendations. By evaluating three micro-experiences, the study shows the importance of transactional assessment of the customer journey using the NPS. Thus, the study moves away from evaluation of a general customer journey to evaluation of a transactional customer journey. Ensuring customer satisfaction is a key challenge for service organisations, especially in view of the need to innovate to meet the demands of the environment (Urueña et al., 2023). This study reveals a negative relationship between AWT and CSAT, meaning that longer waits translate into lower satisfaction. This finding supports previous research highlighting the critical impact of waiting time on customer satisfaction and loyalty in various service contexts. The negative impact of waiting time on customer satisfaction is explained in terms of expectation confirmation theory, which suggests that if customers expect a short wait and then experience a long one, they may perceive the service as poor. In addition, queuing theory evaluates the waiting experience in terms of factors such as queue length, variability of service time and fairness of service delivery.

5.1. Theoretical implications

The results of the present study enrich CX theory by identifying different stages of service management. The conclusions are drawn based on expectation confirmation theory and queuing theory. The results confirm the relationship between waiting time and satisfaction, thus supporting expectation confirmation theory (Oliver, 2022). Furthermore, queuing theory is relevant in terms of its premise that waiting time tolerance is directly related to service quality justification (Larson, 2022). Therefore, the principles of queuing theory suggest the need to prioritise customer-centric policies, showing the importance of customer service perception as a moderating factor of customer satisfaction.

This research contributes to agency theory. Given the rapid rise of digitalisation processes over the last decade, the findings of this study reaffirm the need for continuous training to respond to customer queries. Likewise, equity theory (Adams, 1963) and transaction cost economics (Coase, 1995) provide evidence that perceived fairness in interactions with customers directly influences customer satisfaction and cooperation between customers and companies.

Furthermore, the results support two-factor theory (Herzberg, 1987), underscoring the difference between hygiene factors such as waiting time and FCR (which predict dissatisfaction) and motivational factors such as service personalisation and added value (which improve customer loyalty and recommendations). This finding helps clarify the relationship between service performance and customer satisfaction, highlighting the importance of promoting positive and memorable experiences.

5.2. Practical implications

In practical terms, companies must develop strategies focused on customer satisfaction, conveying efficiency in the services they provide (Khan & Mujitaba, 2023). Hence, companies should reduce waiting times, recognising that this micro-experience is a key operational factor due to its strategic importance for organisations. This study and the literature show that it is important for customers to perceive that the company is willing to resolve their query, cares about them and offers them the opportunity to talk to an agent. These perceptions can condition customer satisfaction and, therefore, customer attitudes and behaviour towards the organisation (Ilk & Shang, 2022).

The relationship between call time (AHT) and customer satisfaction with a service desk (CSAT) is complex and depends on several factors. The literature suggests that reducing AHT can increase customer satisfaction by providing quick and efficient responses to queries. However, it can also have the opposite effect if customers perceive a lack of empathy and personalisation. The relationship varies according to query complexity. Lower AHT may be beneficial for simple queries but detrimental for complex queries. In addition, the relationship between AHT and CSAT varies by sector and type of service. It is explained by classical theories such as equity theory and transaction cost economics. Perceived fairness affects satisfaction and cooperation in professional relations. Meanwhile, transaction costs relate to the expenses associated with transactions.

In many call centres, a basic goal is to reduce call times, under the assumption that shorter conversations mean that more customers can be served. This approach provides higher productivity and lower costs. However, to ensure customer satisfaction, technical service agents must focus on providing efficient and effective attention to address the customer's problem, regardless of the time it takes. They must always take into account the context and complexity of the query.

Regarding FCR and CSAT, the literature reports a positive relationship in most cases. However, query complexity is an important nuance in this relationship. Some clients value complete query resolution above all else, even if it requires multiple interactions, as per Herzberg's two-factor theory. In this study, query resolution is considered a hygiene factor in meeting customers' minimum expectations of a technical service. The study shows that FCR is the factor that relates most strongly to CSAT. Therefore, companies are encouraged to enhance the aspects related to successful FCR within organisations such as the knowledge management of service agents and their ability to make efficient use of available customer information (Abdullateef et al., 2011).

The relationship between satisfaction (CSAT) and recommendations (tNPS) involves other factors besides hygiene factors. Two-factor theory (Herzberg, 1987) states that motivators generate greater satisfaction, loyalty and recommendations by boosting CX. These factors include personalisation, added value, active listening and building strong relationships. This notion suggests a positive but moderate relationship between satisfaction and recommendations because motivators go beyond the satisfaction that results from basic elements of the product or service.

In conclusion, customer satisfaction is highly correlated with recommendations measured by tNPS. Therefore, tNPS (i.e. the probability of customer recommendations) should not be considered an end in itself but rather a consequence of the sum of the micro-experiences perceived during the service.

5.3. Limitations and future research

One limitation of this study is its approach in terms of the industry (technology) and type of customers (B2B). This approach means that the conclusions and findings of the study may not be universally applicable to other industries or types of companies. It raises the need for future research to expand the scope and applicability of the present research.

Because the service sector plays a key role in various organisations, it would be of great relevance to investigate how digitalisation processes are influencing business–customer interactions in customer call centres. It would be of interest to considering how customers value the use of artificial intelligence as an innovation to improve services (Gomez & Frias, 2022). A potentially fruitful field of study would be to examine the way in which technological trends

such as artificial intelligence and digitalisation are reshaping the micro-experiences analysed in this paper. Such research could shed light on how companies can adapt and leverage these innovations to improve customer experience and strengthen their competitiveness in an ever-changing environment. Likewise, it would be of interest to consider the human factor as a promoter of organisational change (Saiz-Sepalveda et al., 2022).

In a context where companies have limited control over their interactions but where the quality of these interactions is critical to both the customer and the development of relationship with customers, future research should focus on the concepts of the micro customer journey and micro-experiences in various industries. The objective would be to identify patterns that could enrich the findings of the current study. Such research would provide a more detailed understanding of how customers experience and evaluate their interactions with companies, which could improve strategic decision making and CEM.

In terms of economic theories related to the interaction between companies and customers, a wide range of perspectives and approaches can be applied to different aspects. For example, in the context of the micro-experience of waiting time, queuing theory is useful to understand certain aspects of this relationship. However, this theory does not comprehensively address the dimension of communication urgency. This gap suggests the need for further research that explores in detail how economic theories can be applied to the concept of CX.

Finally, each industry, company and market has its own particular features that make it unique in terms of customer interactions. This situation underlines the need to adapt the approaches and theories applied in each case. This adaptation to the uniqueness of each context can create a wide range of research perspectives in this field, thus enriching the understanding of the dynamics of business–customer relationships and enabling more effective business strategies in the future.

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