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BUFFERING B2B SERVICE FAILURE: THE ROLE OF CUSTOMER ENGAGEMENT

ABSTRACT

Research has shown that customer engagement contributes positively to competitive advantage. It is well-established that in the process of building and maintaining customer engagement, companies may make mistakes (service failures) that can jeopardise the success of customer-firm relationships. Studies on customer engagement have mostly focused on individual consumers, making this understanding in business-to-consumer (B2B) settings limited. Further, research on the interaction between customer engagement and service failure is scant. Given the unique characteristics of B2B marketing and relationships, we investigate the role of industrial customer engagement in customer responses to service failure. This knowledge is critical given the detrimental effects of B2B service failure on business relationships, revenues, and profitability. We report findings from three studies, which show that high levels of industrial customer engagement act as a buffer to the negative effects of service failure on customers. This finding is pronounced for failures that are small and repeated over time. B2B marketing managers are encouraged to develop, measure, and monitor customer engagement, while simultaneously seeking mechanisms that allow customers to voice failures, especially those that may seem small but occur repeatedly.

Keywords: Customer engagement, service failure, micro-failures, industrial customers

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1.0 INTRODUCTION

Customer engagement is a central concept in today's highly dynamic and interactive business environment. The concept is commonly viewed as a customer's elevated cognitive, emotional, behavioural, and social disposition toward objects, brands, or firms (Brodie et al., 2011; Hollebeek, Srivastava, & Chen, 2019; Kumar et al., 2019). In other words, customer engagement refers to the intensity of the customer's interactions and connections with a brand or firm's offerings or activities (Vivek et al., 2014). Customer engagement has fast become a strategic imperative for many firms through links to corporate performance indicators, including sales growth and profitability, sustainable competitive advantage, customer involvement in product development, as well as customer feedback and referrals (e.g., Brodie et al., 2013; Kumar et al., 2010; Roy et al., 2018). Indeed, engaged customers are essential for firm performance and growth (Itani, Kassar, & Loureiro, 2019), and customer engagement has become the new metric to measure brand performance (Hollebeek, Glynn, & Brodie, 2014). For these reasons, understanding customer engagement has rapidly gained attention in both academia and the business community.

The literature has thus far primarily examined customer engagement in the business-to-consumer (B2C) context. In such contexts, customer engagement has been shown to affect a range of outcomes, including satisfaction (Brodie et al., 2013) and loyalty (Hollebeek, 2011; Islam & Rahman, 2016), as well as firm performance (So, King, & Sparks, 2014; van Doorn et al., 2010), reputation (Dijkmans, Kerkhof, & Beukeboom, 2015; van Doorn et al., 2010) and value (Kumar et al., 2010; Vivek et al., 2014). Despite the relevance of customer engagement in business-to-business (B2B) settings (e.g., Jaakkola & Aarikka-Stenroos, 2019; Kumar & Pansari, 2016; Youssef et al., 2018), research into B2B customer engagement, or industrial customer engagement, is limited. This is surprising given the critical role of customer engagement in facing modern marketplace competition, and the potential for engaged customers to become long-term business partners (Youseff et al., 2018). Moreover, many B2B firms fail to effectively manage the engagement of their customer base. Research suggests that only 29 percent of B2B customers are engaged, with the majority either indifferent or disengaged (Kamins, 2016). Such findings represent a substantial opportunity for firms, with engaged customers leading to top line growth, stability to manage disruption, and overall sustainability as an organisation (Hans et al., 2019).

Emerging research in the B2B domain has addressed the unique nature of industrial customers (Zhu & Zolkiewski, 2015), particularly in terms of engagement (Hollebeek, 2017). However, the nature and implementation of firm activities, tactics, and strategies that serve to enhance or optimise industrial customer engagement is largely unknown. One critical knowledge gap concerns the role of customer engagement in relation to customer responses to service failure, particularly within the B2B context and with varying magnitudes of failure (see Table 1). Yet, service failures in industrial settings are not uncommon, and research shows that the nature and quality of the customer-firm relationship influences customer responses to service failure (see Fouroudi et al. (2020) for a review). This article addresses this gap in understanding through investigating the influence of industrial customer engagement on customer responses to different types of service failures. Such understanding is important given the detrimental effects of B2B service failure on business relationships, revenues, and profitability (Hübner, Wagner, & Kurpjuweit, 2018). This knowledge is also important as B2B interactions require close attention to the relational aspects of exchanges (Coviello & Brodie, 2001), which includes service failure.

INSERT TABLE 1

Against this background, the aim of this research is to deepen understanding of industrial customer engagement through empirically examining its role in relation to customer responses to B2B service failure. Our research makes two key contributions. First, we investigate the intensity (at high and low levels) of industrial customer engagement, with such relationships varying in terms of customer engagement (Hollebeek & Chen, 2014; Hollebeek & Macky, 2019; Naumann, Bowden, & Gabbot, 2020). Critically, the intensity or strength of customer engagement can significantly impact firm performance (Palmatier et al., 2013). Further, the service failure and recovery literature underscore the importance of the customer-firm relationship in determining customer response (e.g., Holloway, Wang, & Beatty, 2009; Kim, Ok, & Canter, 2012). Based on these notions, we empirically examine how the intensity of industrial customer engagement influences customer responses to B2B service failure. It can be expected that highly engaged customers are more tolerant of a service failure than customers who are not engaged with the firm. Second, the paper provides a nuanced view of service failure in the B2B domain through investigating customer responses to small, micro, and large failures. This understanding is critical given that service failures vary in frequency and magnitude, and thus differ in their effects on customers and firms (Sands et al., 2020).

The remainder of this paper is organised as follows. First, we provide a review of relevant literature as a foundation to the development of our theoretical framework. Next, we describe our pre-test and three research studies along with the method, analysis, results, and discussion for each. Finally, we conclude with an integrated conclusion where we discuss the research findings in terms of theoretical and managerial implications. We conclude with a reflection on study limitations and considerations for future research.

2.0 LITERATURE REVIEW

2.1 Customer-Firm Relationships as a Social Exchange

Social exchange theory (Blau, 1964; Thibaut & Kelley, 1959) holds that an individual enters into a relationship based on an evaluation of the tangible and intangible costs and benefits. These costs and benefits may be economic, social, or a mix of both. Social exchange theory also argues that relationships are maintained based on certain reciprocity “rules” and rewarding reactions; in other words, achieving a state of “reciprocal interdependence” (Blau, 1964). If this state is achieved, relationships are enduring and characterised by trust, loyalty, and mutual commitment (Cropanzano & Mitchell, 2005). Social exchange theory is one of the most extensively adopted frameworks for explaining customer-firm relationships (Cropanzano & Mitchell, 2005). It has also been applied in research on customer engagement (Brodie et al., 2011; Harrigan et al., 2018; Hollebeek, 2011; Simon et al., 2016), the nature of B2B relationships (e.g., Chang et al., 2015; Lussier & Hall, 2018) and service failure and recovery (e.g., Choi, Lotz, & Kim, 2014). Applying social exchange theory to our research, a business customer has an established relationship with a brand based on an evaluation of the firm’s investment, and the anticipated gains from their exchanges. In other words, the customer invests resources into the relationship when the firm provides value. Further, the nature of the customer-firm relationship is influenced by the customer’s level of engagement (Pansari & Kumar, 2017; van Doorn et al., 2010).

2.2 Customer Engagement as a Means to Develop, Maintain and Enhance Customer-Firm Relationships

Customer engagement has received increasing academic attention since its inclusion in the Marketing Science Institute's research priorities in 2010 (Marketing Science Institute, 2010). Throughout the literature, a broad array of definitions reveals a debated conceptualisation of customer engagement (Clark, Lages, & Hollebeek, 2020). However, two broad areas of agreement exist: customer engagement's interactive core and multidimensional nature (Roy et al., 2018; Vivek, Beatty, & Morgan, 2014). Reflecting its interactive nature, customer engagement has been defined as a "psychological state that occurs by virtue of interactive experiences with a focal agent/object (e.g., a brand) in service relationships" (Brodie et al., 2011, p. 260). In terms of multidimensionality, customer engagement is commonly discussed as having cognitive (e.g., interest), affective (e.g., feeling), and behavioural (e.g., actions) investments in brand or firm interactions (Harrigan et al., 2018; Hollebeek et al. 2014; Vivek, Beatty, & Morgan, 2014). Interactions between customers and a brand have also been viewed as dynamic (Hollebeek et al., 2014) and social (Viveket al., 2014). In this way, customer engagement is an important mechanism by which to understand how service relationships are developed, maintained and enhanced (Jaakkola & Alexander, 2014; Naumann, Bowden, & Gabbot, 2020). The concept of engagement in a business context was first mentioned in relation to employee engagement (So et al., 2014). Investigating industrial customer engagement not only adds to the limited field of knowledge, but also overcomes a long-held and inaccurate assumption that emotions have little effect in business relationships and environments (Youssef et al., 2018).

Literature links customer engagement to a wide array of outcomes for individuals (Marbach, Lages, & Nunan, 2016; Vivek, Beatty, & Morgan, 2012) and organisations (Jaakkola & Alexander, 2014; Kumar & Pansari, 2016). More specifically, customer engagement has been shown to positively impact customer satisfaction (Brodie et al., 2013), purchase/usage intentions (Brodie et al., 2011), and loyalty (Hollebeek, 2011; Islam & Rahman, 2016), as well as firm performance (So et al., 2014; van Doorn et al., 2010), firm reputation (Dijkmans et al., 2015), and firm value (Kumar et al., 2010; Vivek et al., 2014). Such effects have been primarily gleaned in B2C contexts (Storbacka et al., 2016), focusing on activities of the customer in relation to the firm or brand (Pansari & Kumar, 2017). Despite the relevance of customer engagement in business settings (e.g., Jaakkola & Aarikka-Stenroos, 2019; Kumar & Pansari, 2016; Youssef et al., 2018), (re)conceptualisation or examination of the engagement concept in B2B settings is rare (Alvarez-Milán et al., 2018; Nunan et al., 2018). This is a critical gap in understanding given that customer engagement is known to vary across situational conditions (Brodie et al., 2011) and the strategic importance of strong and enduring business relationships (Youssef et al., 2018).

Customer engagement can be neutral (Brodie et al., 2013) or positively or negatively valenced towards a brand, firm or object (Hollebeek & Chen, 2014) or unique relationship elements (Bowden et al., 2017; Hollebeek & Macky, 2019). The literature pays the greatest attention to positive customer engagement (Clark, Lages, & Hollebeek, 2020; van Doorn et al., 2010), which is typically motivated by personal self-interest to maximise consumption or relational benefits, acquire new skills, or obtain desired incentives (van Eijk & Steen, 2014). Positive customer engagement has been linked to enhanced outcomes, including affective commitment, brand equity, trust, customer retention, loyalty, profitability, and positive word-of-mouth (WOM) (e.g., Bowden, 2009; Brodie et al., 2011; Islam and Rahman, 2016; van Doorn et al., 2010). Negative customer engagement arises from a perceived negative experience (e.g., a service failure), and can result in detrimental impacts on brand reputation and value through customers' negative WOM, brand switching, avoidance, rejection and potential retaliation and revenge behaviours (Alexander et al., 2018; Dolan et al., 2016; Hollebeek & Chen, 2014; Juric,

Smith, & Wilks, 2015). Customer engagement is also characterised by varying levels of strength or intensity, such as high (e.g., co-creation/destruction), medium (e.g., positive/negative contribution) and low (e.g., consuming/detaching), or on a continuum from low (passive) to high (active) (Dolan et al., 2016; Dolan et al., 2019; Malthouse et al., 2013; Muntinga, Moorman, & Smit, 2011). Emerging research explores other levels of engagement, such as: (i) passive engagement, (ii) non-engagement, and (iii) disengagement (cf. Ng, Sweeney, & Plewa, 2020). While it is highly likely that B2B customer engagement varies in both valence and intensity, this notion is largely unexplored.

2.3 How Service Failures Impact Customer-Firm Relationships

Any service delivery that falls below a customer's expectation is considered a service failure (Gelbrich, 2010). Even firms that typically display exceptional service are prone to some degree of service failure. The literature reveals extensive study of service failure in the consumer context and from the consumer perspective (Khamitov, Grégoire, & Suri, 2020), demonstrating that service failure can aid firms in improving service management. While a focus on B2C has occupied much of the research to date, the consumer context contributes to understanding customer service in B2B markets (Parasuraman, 1998). Similarities do exist between B2C service failures and those in B2B markets (Baliga et al., 2020; Cronin & Morris, 1989), including the recovery mechanisms, causes for failure, and the type of failure (Baliga et al., 2020). However, it is important to recognise that B2B exchanges are fundamentally different from B2C exchanges (Heide & John, 1992). Nonetheless, there is ample opportunity for service failure research to be conducted in the B2B domain (Mendes Primo, Dooley, & Rungtusanatham, 2007; Zhu & Zolkiewski, 2015). In comparison to B2C settings, service failures in B2B environments can have an amplified impact and spread via a "domino effect" (Zhu & Zolkiewski, 2015). Regardless of setting, service failure results in a range of negative effects including customer churn, dissatisfaction, and negative WOM (Bitner, Booms, & Tetreault, 1990; Johnston & Hewa, 1997).

Much of the existing research on service failure tends to focus on large failures, ignoring more minor annoyances or inconveniences. The focus on larger failures seems reasonable given that large service failures are more noticeable and appear to represent more of a threat to a firm than smaller failures. However, the definition of service failure technically encompasses all degrees of failures, including small failures that have received some attention (Sands et al., 2020; Spreng, Harrell, & Mackoy, 1995). Past research on service failure severity has measured a customer's assessment of the perceived intensity of the service problem (Blodgett, Hill, & Tax, 1997). Subsequent assessments of severity determine the degree of perceived harm or potential for loss (Folkman et al., 1986). When customers perceive the magnitude of the service failure to be severe, the exchange relationship becomes unbalanced, leading customers to deploying various resources and strategies to readjust their position in order to manage or mitigate the negative effects of the encounter (McColl-Kennedy & Sparks, 2003). Consequently, the way customers appraise the nature of the service failure influences not only their role in the service recovery effort, but also their subsequent responses toward the firm generally.

Customers tolerate service failure for a range of reasons (Bozzom, 2008). For instance, a pre-existing relationship that has been successful may be enough to keep the customer loyal to the service provider. Alternatively, there might be a level of buyer dependency on the supplier, perhaps because of high switching costs. Regardless of the reason for tolerating failure, repeated service failures increase the likelihood that customers will switch service providers, while single

(relatively minor) negative events are mostly disregarded (Sands et al., 2020; Spreng, Harrell, & Mackoy, 1995).

2.4 Hassle Effects: How Small and Repeated Service Failure Compounds

Focusing on the small end of the service failure spectrum, Sands et al. (2020) draw on hassle effects (Lewinsohn & Talkington, 1979; Kanner et al., 1981) – a concept from psychology and health research that explains how commonly occurring small (versus large) negative events can have cumulative and compounding effects over time. Hassle effects as described as comprising slight annoyances and are appraised as such based on the meaning and significance the individual ascribes to the situation (DeLongis et al., 1982; Kahn & Luce, 2006; Ruffin, 1993; Stefanek et al., 2012). Paralleling hassle effects in the domain of service failure, Sands et al. (2020) propose small and repeated failures as an under-studied form of failure, with potentially damaging effects for firms. They suggest that small and repeated service failures, or micro-failures, compound over time and amplify the negative outcomes of subsequent micro-failures. This means that the effect of a micro-failure on customers is likely to be disproportionately large, and a series of micro-failures may cause customer defection more akin to that of a large service failure (Sands et al., 2020).

In line with the principles of hassle effects (Lewinsohn & Talkington, 1979; Kanner et al., 1981), it is expected that the customer's level of engagement with the firm will have a differential impact on their responses to service failure based on the specific type encountered, be it a small failure, a small and repeated failure (micro-failure), or a large failure. Accounting for micro-failures is important as most customer-firm relationships end not through a sudden break, but by fading out slowly over time (Coulter & Ligas, 2000; Rusbult, Zembrodt, & Gunn, 1982) and ultimately lead to silent defection (Sands, et al., 2020). Understanding and managing micro-failures is also important given that successful maintenance of B2B relationships leads to relational behaviours that positively affect firm performance (Lusch & Brown, 1996).

2.5 Theoretical Framework

Scant empirical attention has focused on customer engagement in the B2B context (Zhu and Zolkiewski, 2015) or the effects of small and repeated service failures (Sands et al., 2020). This is notable given the importance of B2B relationships and the potential for negative impacts of minor stressors occurring in business relationships. We draw our theoretical framework for understanding the influence of industrial customer engagement on buyer responses to service failure from social exchange theory and hassle effects. Our theoretical framework appears in Figure 1.

INSERT FIGURE 1

Based on our framework, and in line with principles of hassle effects, we expect small and repeated failures, or micro-failures, to have differential effects on buyer outcomes. We formalise this prediction as follows: When experiencing a micro-failure in a B2B industry context, industrial customers with high (low) customer engagement will experience less (more) negative effects.

3.0 OVERVIEW OF STUDIES

With this research, we set out to determine the role customer engagement has in buffering the negative effect of service failure for industrial customers in B2B contexts. Specifically, we

propose that different levels (high or low) of customer engagement will have a differential effect on buffering negative effects, based on the type of service failure (small, micro, and large) differing in their frequency and magnitude.

Across three studies, we show that industrial customer engagement attenuates the negative effect of service failure on industrial customers, especially when the failure is small and repeated over time (micro-failures). The studies employ an experimental design to investigate the effect of customer engagement intensity (high versus low levels) and type of service failure (small, micro, large failures). We find significant interactions between service failure type and customer engagement intensity on managerially important outcome variables (e.g., complaint intention, purchase intention, relationship exit intention, and negative emotions). Our pre-test set out to establish that customer engagement differs by industrial sector, with respondents rating their engagement with a range of B2B brands across several sectors drawn from the WPP Kantar top 50 brand list (Winter, 2019). Results show that customer engagement differs by industrial sector – with the highest level of engagement reported for technology brands (i.e., Salesforce, IBM, Google, etc.).

We subsequently focus Study 1 and Study 2 on B2B relationships with technology suppliers and test the consistency of our findings in a different B2B sector (financial services) context in Study 3. Study 1 asked respondents to recall service failures that align with the failure conditions (small, micro, large) and imagine similar failures occurring with the brands they reported as having a high (versus low) connection to. Results show that high levels of industrial customer engagement have positive impacts on customer responses following service failure. In particular, the effect of micro-failures on customer responses is polarising for those with low (versus high) customer engagement. Specifically, high customer engagement levels act as a buffer for the negative effects of micro-failures on customers. Study 2 replicates and extends Study 1, adding an additional condition of ‘no service failure’ and includes purchase engagement as an outcome variable. Respondents were asked to consider their experiences with brands that they have a low (versus high) connection to and presented service failure scenarios that align with the failure conditions. Finally, Study 3 replicates and extends Study 2 to investigate a different B2B industry sector - financial services (i.e., American Express, VISA, PayPal, etc.). In doing so, we test the boundaries of our results to determine if the interactive effect between industrial customer engagement and service failure extends beyond technology brands.

3.1 Pre-test

Customer engagement can have unique cognitive, emotional, and behavioural dimensions that require a context-specific approach (Calder, Malthouse, & Maslowska, 2016). Given this, the goal of our pre-test is to (a) provide preliminary evidence for differences in the level of customer engagement intensity (Hollebeek et al., 2014) across different B2B industry sectors, and (b) select a product category with a high level of customer engagement to be used in subsequent studies.

3.1.1 Method and Procedure

We compiled a list of B2B brands within the top 50 global brands drawn from the WPP Kantar top 50 brand list (Winter, 2019). Cloud Research’s online panel was employed to recruit business employees or owners responsible for B2B purchasing for themselves or others (N = 64, M_{age} = 34.7, female = 50.8%, all from the U.S.) (see Buhrmester, Kwang, & Gosling, 2016 for discussion of benefits of the online panel as a data source, and Kees et al., 2017 for a discussion

of online panel reliability; and Litman, Robinson, & Abberbock, 2016 for a discussion of the Cloud Research platform). Respondents were first asked to select brands they work with in a business context from the list of brands. Next, they rated each brand in terms of their cognition (I often think about the brand), affect (I feel positively about the brand) and activation (This brand is my favourite brand to use among all options in its product category).

3.1.2 Results

Table 2 provides the mean and standard deviation scores for each brand. We compiled the brands into their relevant category (technology, telecommunication, finance, other) and calculated weighted averages for means and standard deviations. Across all three dimensions, technology brands rated the highest (cognition $M = 4.83$, $S.D. = 1.56$; affect $M = 5.51$, $S.D. = 1.09$; activation $M = 5.39$, $S.D. = 1.33$).

INSERT TABLE 2

3.1.3 Discussion

Our results reveal that differences in customer engagement levels exist across B2B industrial categories and across brands within these categories. This finding is consistent with our prediction, specifically highlighting differences across industrial categories in terms of industrial customers' cognitive, affective, and activation engagement. We find that across the industrial categories that we measure, all three dimensions of customer engagement are highest for brands in the technology sector. Based on this, we focus on industrial customer relationships in the technology sector for Study 1.

3.2 Study 1

3.2.1 Sample, Design and Procedure

An online panel was employed to recruit business employees or owners responsible for B2B purchasing for themselves or others. Respondents were recruited from Cloud Research panels ($N = 420$, $M_{age} = 36.9$ ($S.D. = 11.29$), female = 52.6%, all from the U.S.). Analysis of responses identified eight respondents who failed the attention checks. Removal of these cases resulted in a total sample of 412 respondents.

The study featured a quasi-experimental design. Respondents first selected from a list of B2B technology suppliers they engage with and then chose the brand they felt most connection ("high engagement") or least connection ("low engagement") to from the list. Respondents were then randomly allocated to either the high or low customer engagement condition. Next, all respondents were randomly allocated into a service failure scenario ("small", "micro", or "large"). In each condition, respondents were asked to recall an interaction with the brand where they had experienced: (a) a small service failure, where your expectations were missed by a narrow margin (small-failure condition), (b) a series of small service failure, where your expectations were missed by a narrow margin repeatedly over time (micro-failure condition), or (c) had a large service failure, where expectations were missed by a wide margin (large-failure condition). If that could not recall such an interaction, they were asked to imagine a situation where they could see this happening. Each respondent wrote a summary of 50 or more characters to increase the salience of the service failure. After describing the service failure condition, respondents were presented with the outcome variable measures.

All survey measures and scale reliabilities are presented in the Appendix. Using 7-point scales, respondents answered questions regarding their engagement toward the brand (cognitive,

affective, activation) (Hollebeek et al., 2014), compliant likelihood (I would likely complain about this kind of service failure), relationship exit intentions (never do business with organisation again, take my business elsewhere, switched to another provider, pledged to not return to this organisation, use their product/ services less) (McCull-Kennedy et al., 2009), behavioural intentions (purchase, positive WOM, negative WOM), and negative emotions (offended, disappointed, angry). Using a 5-point scale, respondents answered a question about their consideration set size (How many other service providers would your business consider for [Y] services? ... 1 = “would consider no other firm” to 5 – “would consider all possible firms”) (Nyffenegger et al., 2015). This experiment employed a 2 (customer engagement level: high, low) x 3 (service failure type: small, micro, large) between-subjects design.

3.2.2 Manipulation Checks

First, we conducted two tests of our scenario manipulation. The first test was a one-way ANOVA to assess if respondents perceived differences in customer engagement when asked to think about a brand (a) they felt a strong connection (high engagement) towards or (b) they feel a weak level (low engagement) connection toward. Results found significant differences between the two conditions in the direction expected on each customer engagement dimension: cognitive ($F(1, 410) = 33.25, p < 0.001$; high: $M = 4.96, S.D. = 1.31$; low: $M = 4.16, S.D. = 1.49$), affective ($F(1, 410) = 67.30, p < 0.001$; high: $M = 5.46, S.D. = 1.13$; low: $M = 4.48, S.D. = 1.30$), activation ($F(1, 410) = 1238.10, p < 0.001$; high: $M = 5.99, S.D. = 0.86$; low: $M = 4.59, S.D. = 1.59$).

The second manipulation check assessed participant perceptions of the service failure severity. A one-way ANOVA revealed a significant difference in failure severity ($F(2, 409) = 35.86, p < 0.001$) in the direction expected. Specifically, respondents in the small failure condition reported the lowest severity ($M = 3.27, S.D. = 1.65$) and those in the large failure reported the highest severity ($M = 4.97, S.D. = 1.45$). Those in the micro-failure condition reported a severity score ($M = 3.81, S.D. = 1.62$) between the small and large failures. Post hoc analysis reveals that all three levels of service failure are significantly different from each other in terms of severity; this is as expected given the difference in failure outcomes. Turkey HSD tests reveal the significant differences between small and micro condition ($sig < 0.05$), small and large condition ($sig < 0.001$), and micro and large ($sig < 0.001$).

3.2.3 Results

We conducted a 2 (customer engagement level: high versus low) \times 3 (service failure type: small, micro, large) ANOVA to test the hypothesised interaction effect between customer engagement level and service failure type on complaint intention. We found that the level of customer engagement moderates the effect of service failure type on complaint intention, producing a significant interaction between customer engagement and service failure ($F(2, 410) = 6.30, p < .05$). Pairwise comparisons reveal that for those with high customer engagement who experienced a micro-failure were significantly less likely to complain ($M = 4.03, S.D. = 1.99$) than those with low customer engagement ($M = 4.95, S.D. = 1.47$).

We estimate the same ANOVA to test each subsequent outcome variable. For relationship exit intentions, a significant interaction effect between customer engagement level and service failure type is found ($F(2, 410) = 3.70, p < .05$). Pairwise comparisons reveal that respondents with high customer engagement who experienced a micro-failure were significantly less likely to report exit intentions ($M = 2.51, S.D. = 1.13$) compared to those who had low

customer engagement ($M = 3.78$, $S.D. = 1.41$). The pattern of results indicated that high customer engagement acts as a buffer in the case where micro-failures occur. Analysis of the construct's sub-dimension shows that the items (switch to another provider ($F(2, 410) = 3.80$, $p < .05$; low customer engagement ($M = 4.16$, $S.D. = 1.66$); high customer engagement ($M = 2.74$, $S.D. = 1.54$) and use their products/ services less than before ($F(2, 419) = 3.75$, $p < .05$; low customer engagement ($M = 4.31$, $S.D. = 1.61$); high customer engagement ($M = 2.95$, $S.D. = 1.43$)) are driving the effect for relationship exit intentions.

For behavioural intentions (purchase intention, positive WOM, negative WOM), we only find a significant interaction effect between customer engagement level and service failure type for purchase intention ($F(2, 410) = 5.06$, $p < .05$). Pairwise comparisons reveal that respondents with low customer engagement who experienced a micro-failure were significantly less likely to purchase from the brand in the future ($M = 4.31$, $S.D. = 1.53$) compared to those who had high customer engagement ($M = 5.81$, $S.D. = 1.14$). Again, this pattern of results indicates that high customer engagement acts as a buffer for the negative effect of micro-failures.

In terms of negative emotions (offended, disappointed, angry), we only find a significant interaction effect for 'offended' ($F(2, 410) = 4.82$, $p < .05$) in addition to main effects for service failure type ($F(2, 410) = 9.07$, $p < .001$) and customer engagement level ($F(2, 410) = 6.19$, $p < .05$). Pairwise comparisons reveal that respondents with low customer engagement who experienced a micro-failure were significantly more offended in the micro-failure ($M = 3.41$, $S.D. = 1.62$) and large failure ($M = 3.79$, $S.D. = 1.64$) conditions compared to those who had high customer engagement (micro-failure ($M = 2.69$, $S.D. = 1.46$) and large failure ($M = 3.07$, $S.D. = 1.54$)). Again, this pattern of results indicates that high customer engagement acts as a buffer for the negative effect of micro-failures. Figure 2 shows the interaction effects for complaint intention, purchase intention, relationship exit intention, and the negative emotion 'offended'.

INSERT FIGURE 2

3.2.4 Discussion

Results show that high levels of customer engagement acts as a buffer for the negative effects of small and repeated service failures (micro-failures) on complaint intention, relationship exit intention, purchase intention, and negative emotions (offended). Importantly, these effects occur solely for micro-failures, relative to other service failures (small or large), for complaint and purchase intention, that is, all together the results from Study 1 are consistent with our prediction that an industrial customer's level of engagement can act as a buffer in the case of negative experiences resulting from micro-failures. For individuals with high customer engagement, we find a consistent pattern, whereby the negative effects of micro-failures are buffered, resulting in more positive outcomes. In contrast, we find that micro-failures produce consistently (stronger) negative effects for industrial customers with low levels of engagement. Study 2 replicates and extends Study 1, drawing on the same B2B industrial sector (technology) and extending the service failure condition to include a 'no service failure' replicate.

3.3 Study 2

3.3.1 Sample, Design and Procedure

Similar to Study 1, B2B-focused respondents were recruited on the Cloud Research online panel ($N = 444$, $M_{age} = 34.0$ ($S.D. = 10.46$), male = 64.6%, all from the U.S.). Analysis of responses identified five respondents who failed the attention checks and one that was identified a potential

bot using the Qualtrics invisible reCaptcha. Removal of these cases resulted in a total sample of 438 respondents.

A similar quasi-experimental procedure to that of Study 1 was employed, with respondents asked to select from a list of B2B suppliers they engage with and then chose from the list, the brand they felt most (“high engagement”) or least (“low engagement”) connection to, with random allocation into either condition. Next, all respondents were randomly allocated into one of four service failure scenarios (“none”, “small”, “micro”, or “large”).

In each service failure condition, respondents were asked to imagine a hypothetical scenario whereby the brand they had previously selected had a new product category offering for high-speed internet. Depending on the failure condition they were randomly allocated to, they were asked to imagine a situation whereby that the service provider had either a: small failure (in the past 12 months, there had been one day of internet outage), micro-failure (in the past 12 months, there had been a series of failures with internet outage one day a month), and large failure (in the past 12 months, there had been a large failure where there was internet outage for a 12 day block). Table 3 provides a description of scenarios for service failure and the resulting failure outcome.

INSERT TABLE 3

Again, each respondent wrote a summary of 50 or more characters to increase the salience of the service failure. Given we presented a hypothetical scenario, we also asked questions about scenario realism (adapted from Wirtz et al., 2013). No differences across scenarios were found (It is easy to imagine being in the situation described in this study ($F(3, 435)=0.12, p > 0.05$); The scenario is realistic ($F(3, 435)=0.62, p > 0.05$)). After describing the failure condition, respondents were presented with the outcome variable measures.

In addition to the measures from Study 1, respondents also answered questions relating to purchase engagement using items adapted from Kumar and Pansari (2016) (using 7-point scales - “My business will continue engaging with [X] in the near future”, “My business engagement with [X] makes me content”, “The money spent to engage with [X] is worth its value”, “Engaging with [X] makes me happy”; $\alpha = .98$). This experiment employed a 2 (customer engagement level: high, low) x 4 (service failure type: none, small, micro, large) between-subjects design – with the no service failure condition added in this Study.

3.3.2 Manipulation Checks

Again, we conducted two tests for the scenario manipulation. First, a one-way ANOVA assessed whether respondents perceived differences in customer engagement when asked to think about a brand that they felt a strong (high engagement) versus weak (low engagement) connection toward. Results confirmed expected differences between the two conditions for all three customer engagement dimensions: cognitive ($F(1, 436)=38.88, p < 0.001$; high: $M = 5.02, S.D. = 1.32$; low: $M = 4.21, S.D. = 1.42$), affective ($F(1, 436)=72.00, p < 0.001$; high: $M = 5.48, S.D. = 1.11$; low: $M = 4.51, S.D. = 1.29$), activation ($F(1, 436)=128.87, p < 0.001$; high: $M = 5.95, S.D. = 0.84$; low: $M = 4.69, S.D. = 1.42$). Next, a one-way ANOVA revealed a significant difference ($F(3, 434)=87.64, p < 0.001$) in service failure severity (“In the scenario, I read about a problem that was very severe”). Results were in the direction expected: no failure ($M = 2.50, S.D. = 1.35$), small failure ($M = 3.90, S.D. = 1.85$), micro-failure ($M = 4.75, S.D. = 1.60$), large failure ($M = 5.84, S.D. = 1.20$).

3.3.3 Results

We conducted a series of two-way ANOVAs on the outcome variables, and service failure, customer engagement and their interaction as the independent variables. For the variable 'take my business elsewhere' we find a significant interaction ($F(3, 441) = 3.25, p < .05$) between service failure type and customer engagement level. Pairwise comparisons reveal that for those with low customer engagement who experienced a micro-failure were significantly more likely to take their business elsewhere ($M = 5.81, S.D. = 1.26$) than those with high customer engagement ($M = 4.48, S.D. = 1.69$).

In terms of overall behavioural intentions (purchase intention, positive WOM, negative WOM) as outcome variables, we find a significant interaction effect for overall behavioural intention ($F(3, 441) = 4.35, p < .05$) - along with main effects for service failure type ($F(3, 441) = 66.64, p < .001$) and customer engagement level ($F(3, 441) = 17.76, p < .001$). Pairwise comparisons reveal that respondents with low customer engagement who experienced a micro-failure had significantly lower behavioural intentions ($M = 2.81, S.D. = 1.22$) compared to those who had high customer engagement ($M = 3.85, S.D. = 1.22$). Analysis of the construct's sub-dimension shows the interaction effect for micro-failures (purchase from the brand in the future ($F(3, 441) = 2.89, p < .05$; low customer engagement ($M = 3.15, S.D. = 1.66$); high customer engagement ($M = 4.22, S.D. = 1.52$) and spread negative WOM ($F(3, 441) = 2.89, p < .05$; low customer engagement ($M = 5.11, S.D. = 1.60$); high customer engagement ($M = 4.07, S.D. = 1.66$)) are driving the effect for behavioural intentions.

In terms of purchase engagement, we find a significant interaction effect ($F(3, 441) = 2.95, p < .05$) in addition to main effects for service failure type ($F(3, 441) = 34.33, p < .001$) and customer engagement level ($F(3, 441) = 35.78, p < .001$). Pairwise comparisons reveal that respondents with low customer engagement who experienced a micro-failure had significantly lower purchase engagement ($M = 3.15, S.D. = 1.57$) compared to those who had high customer engagement ($M = 4.44, S.D. = 1.55$). Analysis of the construct's sub-dimension shows the interaction effect for micro-failures (money spent to engage with [x] is worth its value ($F(3, 441) = 3.69, p < .05$; low customer engagement ($M = 3.06, S.D. = 1.75$); high customer engagement ($M = 4.47, S.D. = 1.66$) and engaging with [x] makes me happy ($F(3, 441) = 2.69, p < .05$; low customer engagement ($M = 2.99, S.D. = 1.66$); high customer engagement ($M = 4.34, S.D. = 1.74$)) are driving the effect for purchase engagement. Figure 3 shows the interaction effects for Study 2.

INSERT FIGURE 3

3.3.5 Discussion

Building on Study 1, Study 2 finds a similar pattern of findings and provides additional support for our prediction that an industrial customer's level of engagement can act as a buffer in the case of negative experiences resulting from micro-failures. Results from Study 2 show that industrial customers with low customer engagement are more likely to take their business elsewhere when they experience a micro-failure. This pattern of results is the same for the behavioural intentions (purchase from the brand in the future), spread negative WOM, and purchase engagement. In sum, Study 2 provides additional support for Study 1, again finding high levels of B2B industrial customer engagement acts as a buffer to the negative effects of micro-failures. Our results again show that micro-failures produce consistently more negative effects for industrial customers who exhibit low engagement levels. In contrast, for individuals

with high customer engagement we find a consistent pattern whereby the negative effects of micro-failures are buffered and result in more positive outcomes.

3.4 Study 3

3.4.1 Sample, Design and Procedure

Study 3 set out to validate our findings from Study 1 and Study 2 in a different context. We choose a banking and finance setting, drawing on relevant brands from the pre-test. For the purpose of validating our findings in a different category, the service failure types were narrowed to two conditions (no service failure and micro-failure). Again, a B2B-focused sample was recruited online ($N = 229$, $M_{age} = 39.5$ (S.D. = 11.06), male = 62.4%, all from the U.S.). Analysis of responses identified four respondents who failed the attention checks. Removal of these cases resulted in a total sample of 225 respondents.

The same quasi-experimental procedure to Study 1 and Study 2 was employed, with respondents asked to select from a list of B2B banking and finance providers they interact with. Respondents then chose the brand they felt most (“high engagement”) or least (“low engagement”) connection to from the list, with random allocation into either condition. Next, all respondents were randomly allocated into one of two service failure scenarios (“none” or “micro”).

For this study, respondents were asked to imagine a hypothetical scenario, whereby the brand they previously selected had developed “a new one stop banking app for all your banking needs available on your mobile device which is perfect for businesses like yours”. They were then randomly presented with the no failure condition (“over the past year, you have had no issues with the banking app [x] provided. Your service has been running well and your expectations have been met”) or the micro-failure condition (“over the past year, you have had a series of issues with the banking app [x] provided. Specifically, you had a series of small service failures with this brand, where your expectations were missed by a narrow margin repeatedly over time. For you, this has meant that you have lost banking access one (1) day each month for the past 12 months”). Respondents again wrote a summary of 50 or more characters to increase the salience of the service failure.

Scenario realism was equivalent across service failure conditions (“It is easy to imagine being in the situation described in this study” ($F=1.40$, $p > 0.10$); “The scenario is realistic” ($F=1.39$, $p > 0.10$)). All Study 2 outcome variables were retained in Study 3. This experiment employed a 2 (customer engagement level: high, low) x 2 (service failure type: none, micro) between-subjects design.

3.3.2 Manipulation Checks

The customer engagement manipulation for strong (high) versus weak (low) confirmed the expected differences: cognitive ($F(1, 223) = 13.85$, $p < 0.001$; high: $M = 4.53$, S.D. = 1.55; low: $M = 3.86$, S.D. = 1.12), affective ($F(1, 223) = 51.56$, $p < 0.001$; high: $M = 5.13$, S.D. = 1.23; low: $M = 4.08$, S.D. = 0.96), activation ($F(1, 223) = 290.50$, $p < 0.001$; high: $M = 5.87$, S.D. = 0.73; low: $M = 3.52$, S.D. = 1.27). Failure severity was also significantly different ($F(1, 223) = 87.64$, $p < 0.001$) and in the direction expected: no failure ($M = 2.54$, S.D. = 1.57) and micro-failure ($M = 4.40$, S.D. = 1.79).

3.3.3 Results

Again, a series of two-way ANOVAs on the outcome variables, with service failure and customer engagement and their interaction as the independent variables. We find the same pattern of results as in the prior studies - specifically, that high customer engagement acts as a buffer to the negative effects of micro-failures.

For the outcome 'I would pledge to not return to this organisation after this incident', we find a significant interaction ($F(1, 223) = 6.27, p < .05$) between service failure type and customer engagement level. Pairwise comparisons reveal that for those with low customer engagement who experienced a micro-failure were significantly more likely to pledge to not return ($M = 4.30, S.D. = 1.79$) than those with high customer engagement ($M = 3.31, S.D. = 1.21$).

We find a significant interaction ($F(1, 223) = 4.67, p < .05$) between service failure type and customer engagement level on purchase engagement. Pairwise comparisons reveal that for those with low customer engagement who experienced a micro-failure report significantly less purchase engagement ($M = 3.24, S.D. = 1.34$) than those with high customer engagement ($M = 4.52, S.D. = 1.18$). Analysis of the dimension's components reveal two significant interactions. First, for the outcome 'my business engagement with [x] makes me content', we find a significant interaction ($F(1, 223) = 11.65, p < .001$) between service failure type and customer engagement level. Pairwise comparisons reveal that for those with low customer engagement who experienced a micro-failure were significantly less likely to feel content in their business engagement ($M = 2.89, S.D. = 1.32$) than those with high customer engagement ($M = 4.51, S.D. = 1.36$). Second, for the outcome 'the money spent to engage with [x] is worth its value', we find a significant interaction ($F(1, 223) = 10.90, p < .001$) between service failure type and customer engagement level. Pairwise comparisons reveal that for those with low customer engagement who experienced a micro-failure perceived significantly less value in the relationship ($M = 3.09, S.D. = 1.35$) than those with high customer engagement ($M = 4.69, S.D. = 1.23$). Figure 4 shows the interaction effects for Study 3.

INSERT FIGURE 4

3.3.5 Discussion

Building on Study 1 and Study 2, this study finds the same pattern of results in a different B2B setting, providing further support for our predictions. Study 3 replicates and extends the prior studies to investigate the effects in a different industrial sector (financial services). In doing so, we take steps toward testing the boundaries of our results to determine if the interactive effect between industrial customer engagement and service failure extends beyond the technology category. Our findings are consistent with those of Study 1 and Study 2, again showing that for industrial customers, high engagement levels act as a buffer to the negative effects of micro-failures. Again, micro-failures produce consistent negative effects for those with low levels of customer engagement. While the general pattern of effects is the same, we do find effects across different outcomes variables and the absolute size of the effects is lower than the prior studies. It is likely that factors unique to the financial services sector led to these differing findings. Indeed, the degree of lock-in or ease of switching from a financial service provider is more complex than in the case of switching technology providers (Kim, Kliger, & Vale, 2003). Such providers lock-in likely impact customer responses such as intention to switch. For convenience, results across all of our three studies are summarised in Table 4.

INSERT TABLE 4

4.0 GENERAL DISCUSSION

Our research has two main contributions. First, we provide consistent support for the moderating role of customer engagement on industrial customer responses to service failure type. Across all studies, there is a significant interaction, whereby the negative effect of micro-failures on B2B customers is buffered by high levels of customer engagement. The generalisability of results is strengthened across three studies, with different manipulations of service failure type and focusing on different B2B sectors. As proposed, high levels of customer engagement act as a form of customer-firm relationship buffer, through which the effects of small and repeated B2B service failures are ameliorated. This effect is consistent with findings from psychological and health research: (a) the effects of a hassle (micro-failure) compound to have a much larger impact than any one small negative experience, and (b) strong engagement can mitigate the negative effect of a hassle (micro-failure) over time. This latter notion is akin to the saying that those invested in a relationship can view it through “rose coloured glasses”. While individuals with low customer engagement respond in a highly negative manner to micro-failures, customers with high engagement are significantly less likely to do so.

Second, we validate a unique type of service failure – a micro-failure – which parallels the concept of daily hassles (Lewinsohn & Talkington, 1979; Kanner et al., 1981) and operates in a different manner to the kinds of service failures that are traditionally studied, namely those that are small or large in nature. Micro-failures are unique in that they are small but repeat over time, hence can go unnoticed by firms but compound in terms of their impact over time. Drawing on relationship literature, we show that in some instances individuals in a relationship tolerate such irritants – seeing these hassles as part of the relationship, rather than a means by which to end the relationship. In doing so, we show that individuals who are more engaged with the firm are more forgiving of service failures of this nature.

4.1 Theoretical Implications

From a theoretical perspective, we advance theory along three lines: (1) the prevalence and understanding of micro-failures as a unique form of service failure, (2) the moderating role of customer engagement on customer responses to service failure in B2B settings, and (3) extending knowledge about the concept of purchase engagement. This is particularly important given the limited understanding of industrial customer engagement and much existing knowledge drawn from B2C contexts (Alvarez-Milán et al., 2018; Nyadzayo, Casidy, & Thaichon, 2020).

First, this research validates a unique form of service failure, micro-failures, or failures that are small and repeat over time (Sands et al., 2020). This service failure type is distinct from those previously studied in the literature, which are typically small and/ or large. Drawing on social exchange theory (Blau, 1964; Thibaut & Kelley, 1959) and hassle effects (Kanner et al., 1981; Lewinsohn & Talkington, 1979), we shed light on the relationship between industrial customer engagement and B2B service failure - in particular, its role in moderating customer responses to micro-failures.

Second, this study contributes to understanding industrial customer engagement – an area where current understanding is fragmented (Fehrer et al., 2018; Harmeling et al., 2017). We highlight how high levels of customer engagement parallel relationship theory in that people are more forgiving of small hassles when they are in a relationship that is characterised by high engagement. Our findings show that high levels of customer engagement ameliorate the negative

effects of B2B service micro-failures. We show consistency in these findings across multiple manipulations of the type of service failure and across multiple B2B contexts.

Third, we extend knowledge on the concept of purchase engagement, a relatively new construct which has received recent attention and calls for investigation (Kumar & Pansari, 2016; Nyadzayo, Casidy, & Thaichon, 2020). Our focus on purchase engagement provides a more nuanced understanding of the dynamic nature of engagement within B2B markets. We provide further support to research which has started to unpack the mechanisms by which purchase engagement operates in B2B contexts (Nyadzayo, Casidy, & Thaichon, 2020)

4.2 Managerial Implications

This research also provides insight for management practice by bridging customer engagement with new knowledge regarding service failure. From an account manager perspective, our results suggest it may be important to find ways to drive high levels of customer engagement in B2B relationships. Indeed, B2B settings often involve high levels of customer contact, especially in complex buying situations (Bask et al., 2011) and, as such, relationships can be a point of differentiation. Relationship management requires a degree of customisation, or alteration of some elements of the offering, to tailor offerings to the needs and wants of customers – in essence, delivering a level of unique individual service. The tailoring of products and services toward individual industrial customers is way in which B2B firms can demonstrate a willingness to adapt and may act as a means to enhance customer engagement.

Our research also provides managers with clear evidence that customer engagement can enhance firm performance. Specifically, our results also provide evidence that B2B relationships underpinned by higher levels of customer engagement are more tolerant of small and repeated service failures compared to relationships with lower levels of customer engagement. However, the question arises: what should B2B managers do in situations where low levels of customer engagement exist? An obvious answer is to avoid service micro-failures; however, micro-failures are by their nature less visible to firms than large failures. Hence these small, and repeated, failures are less likely to spark customer complaint. Thus, account and customer relationship managers should take steps to encourage customers to voice even the smallest complaints.

Investment in relationship managers, and customer feedback mechanisms, can signal that the firm is willing to listen, and that all client concerns are valid (i.e., no issue if too small to raise). Such relationship parameters may help overcome any customer fear for voicing what may seem like small issues. For a large organisation, involved in network relationships with more than one customer, there may be added complexity in monitoring and responding to the customer network. For instance, a client's level of customer engagement may well vary across multiple business units. In such instances, managers are encouraged to understand all customers engagement profile across the business, not just with a specific business or functional unit. Here, managers could employ tactics to enhance customer engagement across multiple relationships in the network.

4.3 Limitations and Future Research

As with all business research, this paper has several limitations that can guide future research. First, our research focuses on a narrow definition of industrial customers with a focus on dyadic customer-supplier relationships (Lindgreen, 2001). However, B2B relationships are often more complex and can involve a multiplicity of stakeholders across supply chains (Neville & Menguc, 2006; Okazaki et al., 2020). In buying situations where there are several individuals involved in

B2B relationships, there may be a mixture of behavioural patterns and thus different outcomes respectively. It is important that future research strive to investigate how customer engagement and service failure operates in these more complex networks. Furthermore, our design focuses on the supplier's industry and not of the customer. This was an intentional decision, although it is important to note that B2B relationships can consist of multiple industry interactions.

Second, while we consider how industrial customers are more or less engaged, these individuals may also be more or less active (passive) in their behaviour. Such active or passive behavioural variations may also affect their behaviour and loyalty to a given supplier (Roos & Gustafsson, 2011; Selos et al., 2013). Future research should consider how service failures generally, and micro-failures in particular, may be impacted differently across different groups of active or passive groups of customers.

Third, although attempts were made to increase the salience and realism of scenarios, all studies used a hypothetical scenario that may not captured the true nature of real-world service failures. Thus, there is a need for field studies involving controlled experiments, case studies or correlational research in service settings to develop more nuanced understanding of the generalisability of the results. Furthermore, our design is cross-sectional and focused at one point in time, however it is important to capture the dynamic nature relationships via longitudinal studies. This could shed additional insight to the nature and complexity of customer engagement and service failure in the B2B domain.

Finally, while we investigate the effects across two industry sectors (technology and banking), these settings are focused on recurring services. It is important to validate findings in different settings including one-off services and product offerings. For instance, it is important to more broadly understand the role of switching costs and the interaction of customer engagement and service failure. For product categories like banking, there is an inherently high switching cost to move providers. For many customers, the annoyance of micro-failures may be constrained when switching costs are high. In essence, banking customers may be less likely to exit a relationship in general. Furthermore, we do not look at overly complex buying situations, which may have structurally different mechanisms of engagement (Bask et al., 2011). Finally, we call on more research to investigate micro-failures. Specifically, it is important to understand the process and boundaries of micro-failures to better identify how these small, but repeated hassles, operate differently to isolated failures, be it small or large.

4.4 Conclusion

Over three experimental studies, this article has shown the nuances of industrial customer engagement's effect on customer outcomes in the presence of different types of service failures. While no amount of engagement prevents negative customer outcomes such as switching behaviours, we show that industrial customer engagement attenuates these negative outcomes in cases of small and repeated service failures, or micro-failures. As described above, these findings extend conceptual understandings of the value of customer relationship investments to develop industrial customer engagement, as well as providing actionable implications for future research and practice.

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APPENDIX A. MEASUREMENT SCALES

Outcome variables

Complaint Likelihood (scored on a 7-point Likert scale, anchored by “strongly disagree: and “strongly agree”)

I would likely complain about this kind of service failure

Consideration Set Size (Nyffenegger et al., 2015; scored on a 7-point Likert scale, anchored by “I would consider no other firm than [X]” and “We would consider all possible firms”)

How many other service providers would your business consider for [Y] services?

Exit Intentions (McColl-Kennedy et al., 2009; anchored by “strongly disagree: and “strongly agree”) (Study 1 $\alpha = .93$; Study 2 $\alpha = .94$; Study 3 $\alpha = .95$)

Would never do business with this organisation again

Would take my business elsewhere

Would switch to another provider for this product/service

Would pledge to not return to this organisation

Would use their products/services less than before

Behavioural Intentions (scored on a 7-point Likert scale, anchored by “strongly disagree: and “strongly agree”) (Study 1 $\alpha = .91$; Study 2 $\alpha = .87$; Study 3 $\alpha = .89$)

Purchase from the brand in the future

Spread positive word-of-mouth about the brand

Spread negative word-of-mouth about the brand (r)

Negative emotions (scored on a 7-point Likert scale, anchored by “strongly disagree: and “strongly agree”) (Study 1 $\alpha = .73$; Study 2 $\alpha = .84$; Study 3 $\alpha = .90$)

Following your experience with the brand, to what extent would you feel:

Offended

Disappointed

Angry

Purchase Engagement (adapted from Kumar and Pansari, 2016; scored on a 7-point Likert scale, anchored by “strongly disagree: and “strongly agree”) (Study 1 NA; Study 2 $\alpha = .95$; Study 3 $\alpha = .94$)

My business will continue engaging with [x] in the near future

My business engagement with [x] makes me content

The money spent to engage with [x] is worth its value

Engaging with [x] makes me happy

Manipulation checks

Customer Engagement (Hollebeek et al., 2014; scored on a 7-point Likert scale, anchored by “strongly disagree: and “strongly agree”), measured in terms of cognitive, affective, and activation dimensions:

Cognitive (Study 1 $\alpha = .87$; Study 2 $\alpha = .89$; Study 3 $\alpha = .87$)

Using this brand gets me to think about the brand
I think about the brand a lot when I'm using it
Using the brand stimulates my interest to learn more about the brand

Affective (Study 1 $\alpha = .93$; Study 2 $\alpha = .94$; Study 3 $\alpha = .91$)

I feel very positive when I use the brand
Using the brand makes me happy
I feel good when I use the brand
I'm proud to use the brand

Activation (Study 1 $\alpha = .93$; Study 2 $\alpha = .89$; Study 3 $\alpha = .89$)

I spend a lot of time using the brand, compared to other brands in the same category
Whenever I'm doing something in this category, I usually use the brand
The brand is one of the brands I usually use when I use the category

Service Failure Severity (scored on a 7-point Likert scale, anchored by "strongly disagree: and
"strongly agree")

Thinking about the scenario described, I read about a service problem that was very severe

TABLES AND FIGURES

Table 1: Selected recent empirical studies on service failures

Study	Context			Methods	Sample (Total)	Service failure type				Customer engagement
	Industry	Relationships	B2B B2C			General	No failure	Small & repeated	Large	
Balaji et al. 2017	Hospitality	Consumer-Firm	X	Survey	305	X				
Harrison-Walker 2019	Various	Consumer-Firm		Survey	415	X				
Hubner et al. 2016	Logistics	Buyer-Firm	X	Interview	43	X				
Hwang et al. 2020	Hospitality	Consumer-Firm		Experiment	105	X				
Mandl & Hogleve 2020	Music festival	Customer-Customer		Survey	677	X				
McColl et al. 2019	Soil testing	Buyer-Firm	X	Mixed	127	X				
Menguc et al. 2017	Healthcare	Buyer-Employee	X	Survey	800	X				
Mustafa et al. 2020	Digital services	Consumer-Firm		Experiment	415	X				
Norvell et al. 2018	Casual dining	Consumer-Firm		Longitudinal Survey	1282	X	X			
Sundström et al. 2020	Home goods	Buyer-Firm	X	Interview	30	X				
Xu et al. 2019	Airlines	Consumer-Firm		Text-analysis	2439	X				
Yuan et al. 2020	Electronics	Consumer-Firm		Survey	377					X
Zhu & Zolkiewski 2015	Metal finishing	Buyer-Firm	X	Interview	40	X				
This article	Recurring services	Buyer-Firm	X	Experiment	1093		X	X	X	X

Table 2. Mean Customer Engagement Across B2B Brands in Top 50 Brand List

Brand	Cognitive			Affective		Activation	
	N	M	S.D.	M	S.D.	M	S.D.
<i>Technology brands</i>							
Adobe	11	4.45	1.57	5.36	1.12	5.18	1.08
Apple	17	5.35	1.66	5.94	0.75	5.76	1.39
Cisco	3	4.67	0.58	5.33	1.53	5.00	1.00
Facebook	30	4.83	1.76	4.83	1.62	4.73	1.74
Google	33	5.36	1.66	6.00	0.97	5.91	1.33
Huawei	0	0.00	0.00	0.00	0.00	0.00	0.00
Intel	4	4.25	0.50	6.25	0.50	5.25	0.50
Oracle	6	3.83	1.47	5.17	0.75	4.50	0.84
Salesforce	11	4.36	1.63	5.27	1.49	5.18	1.47
Samsung	8	5.50	1.31	6.38	0.52	5.75	1.04
SAP	8	5.50	0.71	4.50	0.71	5.00	1.41
Microsoft	32	4.22	1.70	5.59	1.10	5.66	1.23
<i>Weighted Average</i>		<i>4.83</i>	<i>1.56</i>	<i>5.51</i>	<i>1.09</i>	<i>5.39</i>	<i>1.33</i>
<i>Telecommunication brands</i>							
AT&T	14	4.50	1.91	5.50	1.56	4.50	1.79
Vodafone	1	5.00	.	5.00	.	5.00	
Spectrum	14	4.14	1.96	4.57	1.16	4.21	1.25
Verizon	16	4.94	1.39	5.62	1.31	5.31	1.35
Xfinity	64	4.00	2.00	3.83	2.04	3.33	1.97
<i>Weighted Average</i>		<i>1.40</i>	<i>0.54</i>	<i>1.59</i>	<i>0.44</i>	<i>1.42</i>	<i>0.47</i>
<i>Finance brands</i>							
American Express	4	2.50	0.58	5.75	0.50	4.25	1.50
Mastercard	14	4.64	1.34	5.50	0.94	4.64	1.28
PayPal	28	4.71	1.68	5.18	1.36	5.21	1.32
Visa	21	4.38	1.96	5.52	1.03	5.10	1.09
Wells Fargo	7	3.71	2.14	4.71	1.60	4.00	1.41
<i>Weighted Average</i>		<i>1.99</i>	<i>0.76</i>	<i>2.42</i>	<i>0.53</i>	<i>2.23</i>	<i>0.57</i>
<i>Other brands</i>							
Accenture		0.00	0.00	0.00	0.00	0.00	0.00
GE	2	3.50	2.12	3.50	2.12	3.00	0.00
IBM	4	5.00	1.63	6.00	0.82	5.75	0.96
Toyota	2	6.50	0.71	6.50	0.71	6.50	0.71
UPS	32	4.53	1.69	5.50	1.30	5.03	1.60
<i>Weighted Average</i>		<i>1.13</i>	<i>0.41</i>	<i>1.35</i>	<i>0.31</i>	<i>1.25</i>	<i>0.35</i>

N = number of respondents who regularly interact with each brand in their role.

Note: In the pre-test we measured customer engagement with three items: cognition (I often think about the brand), affect (I feel positively about the brand), and activation (This brand is my favourite brand to use among all options in its product category). We included this three-item scale in subsequent studies and found the correlation to the Hollebeck et al., 2014 multi-item scale was high.

Table 3. Description of Service Failure and Resulting Failure Outcome

Failure Scenario	Failure Description	Failure outcome
No failure	Your service has been running well and your expectations have been met	NA
Small failure	A small service failure with the brand, where your expectations were missed by a narrow margin	One (1) day of outage in 12 months
Small & repeated failure (micro-failure)	A series of small service failures with this brand, where your expectations were missed by a narrow margin repeatedly over time	One (1) day each month across 12 months
Large failure	A large service failure, where your expectations were missed by a wide margin	A 12-day block of outage in the past 12 months

Table 4: Summary of Results Across Our Studies

Study	B2B Industry Variables & Manipulation	Key Results
Study 1	<p>Technology suppliers</p> <p>DV: Complaint likelihood, Consideration set size, Exit intentions, Behavioural intentions, Negative emotions</p> <p>IV: Customer engagement (high versus low) manipulated through random assignment based on respondent self-assessment of engagement with list of brands; Service failure type (small, small & repeated, large) based on random assignment and manipulated through explicit instruction</p>	<p>Significant interaction effects between <i>customer engagement</i> and <i>service failure</i> when presented with a micro-failure (small & repeated failure) for DVs: complaint likelihood, relationship exit intentions (switch to another provider, use their products/ services less than before), behavioural intentions (purchase intention), negative emotions (offended).</p>
Study 2	<p>Technology suppliers</p> <p>DV: Complaint likelihood, Consideration set size, Exit intentions, Behavioural intentions, Negative emotions, Purchase engagement</p> <p>IV: As per Study 1</p>	<p>Significant interaction effects between <i>customer engagement</i> and <i>service failure</i> when presented with a micro-failure (small & repeated failure) for DVs: relationship exit intentions (take my business elsewhere), behavioural intentions, purchase engagement (money spent to engage with [x] is worth its value, engaging with [x] makes me happy).</p>
Study 3	<p>Banking & finance suppliers</p> <p>DV: Complaint likelihood, Consideration set size, Exit intentions, Behavioural intentions, Negative emotions, Purchase engagement</p> <p>IV: As per Study 1</p>	<p>Significant interaction effects between <i>customer engagement</i> and <i>service failure</i> when presented with a micro-failure (small & repeated failure) for DVs: relationship exit intentions (I would pledge to not return to this organisation after this incident), purchase engagement (my business engagement with [x] makes me content, the money spent to engage with [x] is worth its value).</p>

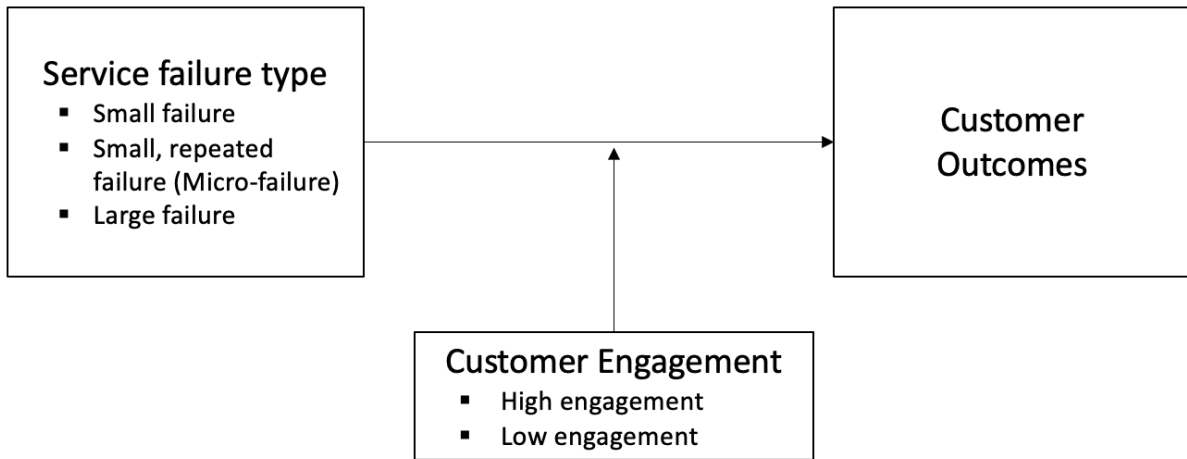


Fig 1. Theoretical Framework

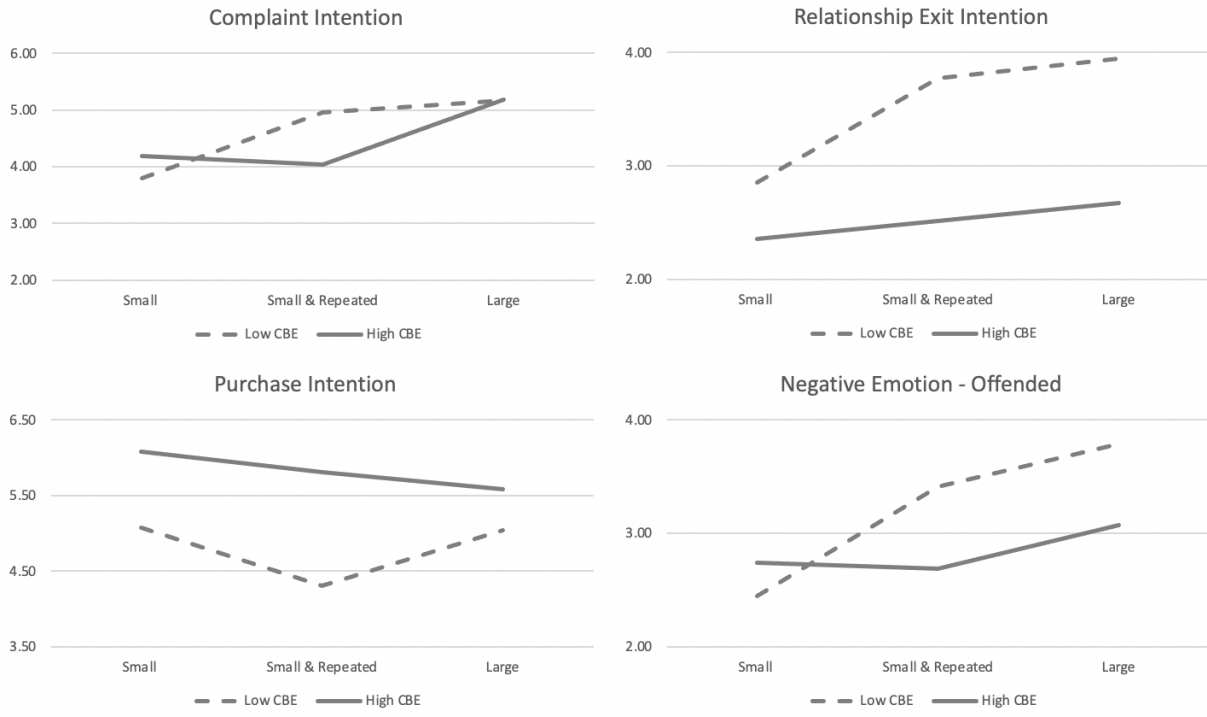


Fig 2. Interaction Effects for Study 1

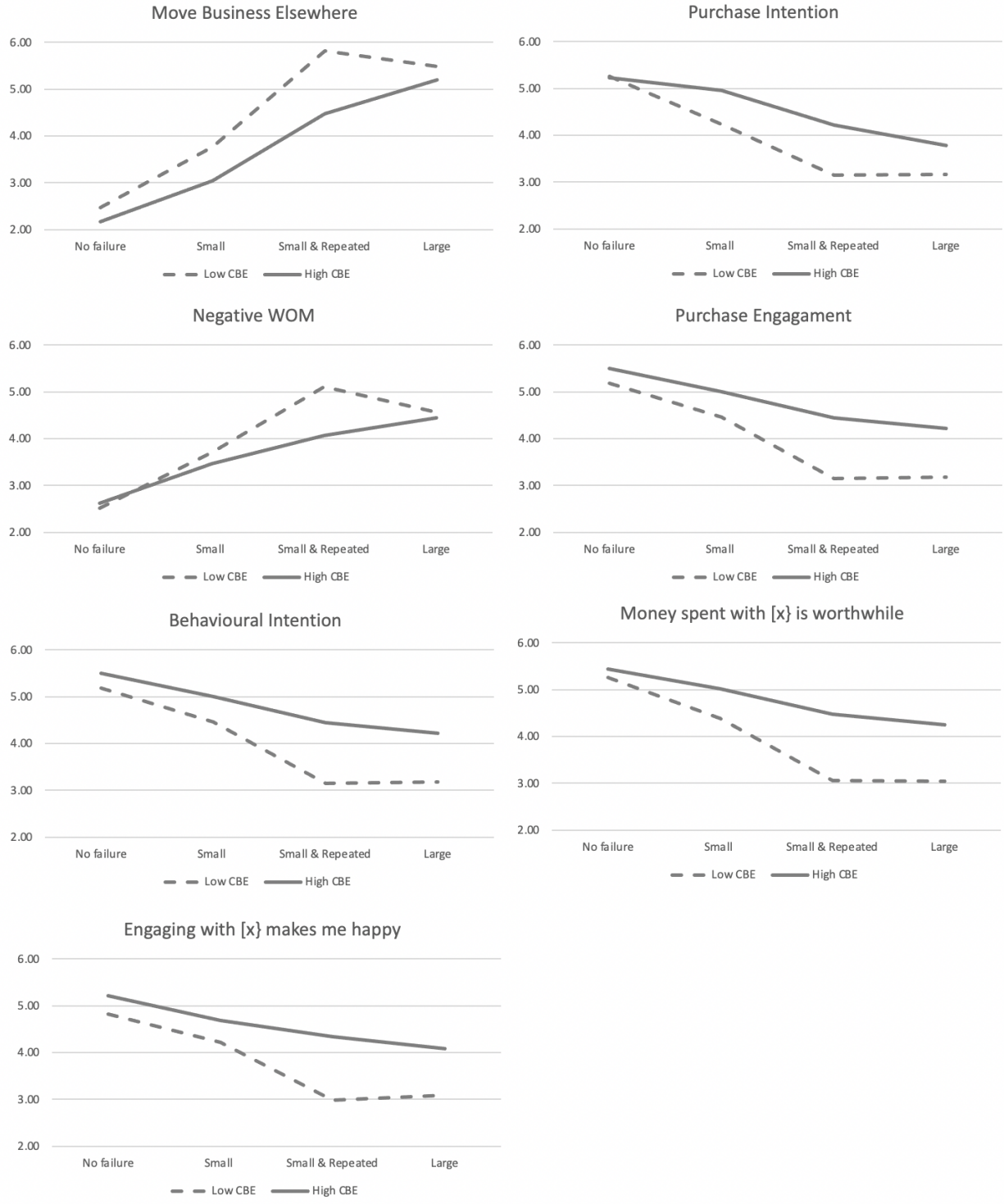


Fig 3. Interaction Effects for Study 2

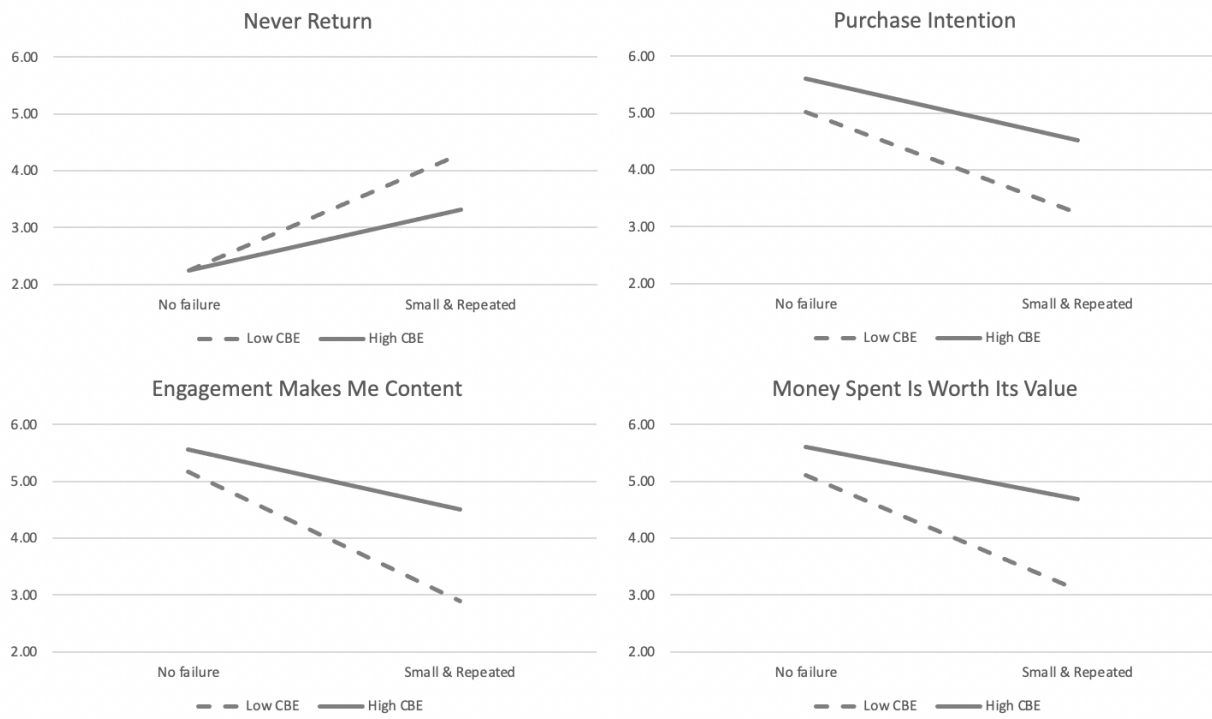


Fig 4. Interaction Effects for Study 3