

**Drivers of the service recovery  
time zone of tolerance  
in a B2B context**

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## **Abstract**

The time zone of tolerance is a new concept within marketing literature (Hogreve et al., 2017), and despite the fact that customer emotions of anger influence the duration of this tolerance, the need arose to explore the dynamics within this tolerance to gain a deeper understanding of the value it might hold to both academics and business. This study set out to discover the main drivers of the time zone of tolerance, uncover the service recovery expectations of customers during this time zone of tolerance, and explore how managing the time zone of tolerance can impact customer behavioural intentions.

This study was conducted in a B2B environment. Valuable insights were gained on the fusion of marketing and engineering drivers that impact the time zone of tolerance. These main drivers are nature of failure, customer-firm dynamics, customer dynamics, firm dynamics and pro-active measures. Deeper understanding was gained on how customers expected firms to manage service recovery during this time zone of tolerance, with candid, honest communication and quick response time the mechanisms most mentioned by participants. Further understanding was achieved on the behavioural intentions of customers related to time zone of tolerance.

## **Keywords**

service failure, service recovery, perceived justice, customer recovery expectations, time zone of tolerance

## **Declaration**

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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## CONTENTS

<b>CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM .....</b>	<b>1</b>
1.1 Introduction.....	1
1.2 Description of the problem .....	1
1.3 The commercial environment.....	3
1.4 Research objectives.....	5
1.5 Scope of the research.....	5
1.6 Conclusion.....	6
<b>CHAPTER 2: LITERATURE REVIEW .....</b>	<b>7</b>
2.1 Introduction.....	7
2.2 Service failure and recovery.....	8
2.2.1 <i>Service failure in a B2B environment</i> .....	9
2.2.2 <i>Service recovery in a B2B environment</i> .....	9
2.3 Service recovery time .....	10
2.3.1 <i>The recovery time zone of tolerance</i> .....	11
2.3.2 <i>Drivers of the time zone of tolerance</i> .....	13
2.4 Service recovery expectations during the time zone of tolerance .....	16
2.4.1 <i>Customer perceived justice during service recovery</i> .....	18
2.4.2 <i>Recovery expectations within the distributive justice dimension</i> .....	18
2.4.3 <i>Recovery expectations within the interactional justice dimension</i> .....	19
2.4.4 <i>Recovery expectations within the procedural justice dimension</i> .....	20
2.5 Customer behavioural intentions.....	21
2.6 Conclusion.....	22
<b>CHAPTER 3: RESEARCH QUESTIONS .....</b>	<b>23</b>
Research question 1 .....	23
Research question 2.....	23
Research question 3.....	23
Research question 4.....	24
<b>CHAPTER 4: RESEARCH METHODOLOGY.....</b>	<b>25</b>
4.1 Introduction.....	25
4.2 Research methodology and design.....	25
4.3 Population.....	26
4.4 Units of analysis.....	26
4.5 Sampling method and size.....	27
4.6 Data collection tool .....	28
4.7 Data collection .....	30
4.8 Data analysis .....	31

4.9 Data rigour and trustworthiness .....	31
4.10 Research limitations.....	32
<b>CHAPTER 5: RESULTS .....</b>	<b>34</b>
5.1 Introduction.....	34
5.2 Description of the sample .....	34
5.3 Results: Research question 1 .....	38
5.3.1 <i>Drivers of the time zone of tolerance</i> .....	38
5.3.1.1 Customer-firm dynamics .....	39
5.3.1.2 Nature of failure .....	41
5.3.1.3 Customer dynamics .....	42
5.3.1.4 Pro-active measures .....	44
5.3.1.5 Firm dynamics .....	46
5.3.2 <i>Summary of the findings of research question 1</i> .....	47
5.4 Results: Research question 2 .....	47
5.4.1 <i>Recovery expectations within the distributive justice dimension</i> .....	48
5.4.1.1 Free spares and spare equipment .....	48
5.4.1.2 Free labour .....	49
5.4.1.3 Free training.....	49
5.4.1.4 Free travel .....	49
5.4.2 <i>Recovery expectations within the interactional justice dimension</i> .....	50
5.4.2.1 Communication.....	50
5.4.2.2 Psychographic factors.....	52
5.4.3 <i>Recovery expectations within the procedural justice dimension</i> .....	53
5.4.3.1 Response time.....	53
5.4.3.2 Just fix it.....	54
5.4.3.3 Root cause analysis.....	54
5.4.3.4 Recovery time.....	55
5.4.4 <i>Summary of the findings of research question 2</i> .....	56
5.5 Results: Research question 3 .....	57
5.5.1 <i>The most critical recovery actions during the time zone of tolerance</i> .....	57
5.6 Results: Research question 4 .....	58
5.6.1 <i>The impact of the critical recovery actions on customer behavioural intentions during the time zone of tolerance</i> .....	58
5.6.1.1 Purchasing behaviour .....	58
5.6.1.2 Customer citizenship behaviours .....	59
5.6.2 <i>Summary of the findings of research question 4</i> .....	61
5.7 Conclusion of findings.....	61

<b>CHAPTER 6: DISCUSSION</b> .....	<b>62</b>
6.1 Introduction.....	62
6.2 Discussion of research question 1 .....	62
6.2.1 <i>Drivers of the time zone of tolerance</i> .....	62
6.2.1.1 Customer-firm dynamics .....	62
6.2.1.2 Nature of failure .....	65
6.2.1.3 Customer dynamics .....	65
6.2.1.4 Pro-active measures.....	67
6.2.1.5 Firm dynamics .....	68
6.2.2 <i>Summary of the discussion of research question 1</i> .....	68
6.3 Discussion of research question 2 .....	68
6.3.1 <i>Recovery expectations within the distributive justice dimension</i> .....	69
6.3.1.1 Free labour .....	69
6.3.1.2 Free training.....	69
6.3.1.3 Free travel .....	69
6.3.2 <i>Recovery expectations within the interactional justice dimension</i> .....	69
6.3.2.1 Communication.....	70
6.3.2.2 Psychographic factors.....	70
6.3.3 <i>Recovery expectations within the procedural justice dimension</i> .....	70
6.3.1 Response time.....	70
6.3.2 Just fix it.....	71
6.3.3 Root cause analysis.....	71
6.3.4 Recovery time.....	71
6.3.5 <i>Summary of the discussion of research question 2</i> .....	71
6.4 Discussion of the results for research question 3 .....	72
6.4.1 <i>The most critical recovery expectations during the time zone of tolerance</i> ... 72	
6.5 Discussion of the results for research question 4 .....	72
6.5.1 <i>Purchasing behaviour</i> .....	73
6.5.2 <i>Customer citizenship behaviours</i> .....	73
6.5.3 <i>Summary of the discussion of research question 4</i> .....	74
6.6 Conclusion of findings.....	74
<b>CHAPTER 7: CONCLUSION AND RECOMMENDATIONS</b> .....	<b>75</b>
7.1 Introduction.....	75
7.2 Principal findings.....	75
7.2.1 <i>Drivers of the time zone of tolerance</i> .....	75
7.2.2 <i>Customer recovery expectations during the time zone of tolerance</i> .....	75
7.2.3 <i>Customer behavioural intentions</i> .....	76

7.3 Implications for firms .....	77
7.4 Limitations of research .....	78
7.5 Suggestions for future research .....	78
<b>7.6 CONCLUSION .....</b>	<b>78</b>
<b>REFERENCE LIST .....</b>	<b>80</b>
<b>ANNEXURE A: CONSENT TO ACCESS CUSTOMER INFORMATION .....</b>	<b>94</b>
<b>ANNEXURE B: INTERVIEW CONSENT FORM .....</b>	<b>95</b>
<b>ANNEXURE C: INTERVIEW SCHEDULE .....</b>	<b>96</b>
<b>ANNEXURE D: ETHICAL CLEARANCE .....</b>	<b>100</b>
<b>ANNEXURE E: ATLAS.TI CODEBOOK .....</b>	<b>101</b>

## LIST OF TABLES

<b>Table 1:</b> Summary of zone of tolerance literature review.....	12
<b>Table 2:</b> Mapping of interview questions with research questions .....	29
<b>Table 3:</b> Information of participants and details of the context.....	36
<b>Table 4:</b> Overview of the results of the main drivers for research question 1.....	38
<b>Table 5:</b> Overview of the results of customer recovery expectations within the justice dimensions.....	48
<b>Table 6:</b> Overview of the behavioural intentions mentioned by participants .....	58

## LIST OF FIGURES

<b>Figure 1:</b> A graphic depiction of the recovery time zone of tolerance within service recovery time and the relationship with customer compensation expectations .....	13
<b>Figure 2:</b> Drivers of the time zone of tolerance .....	16
<b>Figure 3:</b> Number of new codes by interview.....	28
<b>Figure 4:</b> The main drivers of the time zone of tolerance .....	38
<b>Figure 5:</b> Graphical summary of the drivers of the time zone of tolerance .....	47
<b>Figure 6:</b> Overview of expectations related to psychographic factors.....	52
<b>Figure 7:</b> Overview of results for research question 2.....	56
<b>Figure 8:</b> A proposed service recovery time zone of tolerance framework .....	77



# **CHAPTER 1: INTRODUCTION TO THE RESEARCH PROBLEM**

## **1.1 Introduction**

This study aims to explore customers' recovery expectations during the service recovery time zone of tolerance in an industrial business-to-business (B2B) environment. The main objective is to gain an improved understanding of customer service recovery expectations during the time zone of tolerance, when consumers' negative emotions are still under control and their behavioural intentions remain positive towards the firm. Knowledge gathered in this research will enable businesses to manage the time zone of tolerance better and ensure customer recovery expectations remain static for as long as possible until the service recovery is completed. In addition, the paper will contribute to justice and equity theory by gaining a deeper understanding of how to manage customers' perceptions of justice within the time zone of tolerance. Contrary to extant literature on this topic focusing on service recovery actions from the firm's side, this study aims to gain an understanding of the research problem from the customer's perspective. The remainder of this chapter describes the research problem, elaborates on the commercial environment that serves as background to this research paper, states the research objectives, and defines the scope of this study.

## **1.2 Description of the problem**

Due to the large labour component and variability of processes involved, the service environment is prone to frequent service failures (Basso & Pizzutti, 2016). In the B2B environment, there are close relational exchanges between suppliers, intermediaries and customers (Story, Raddats, Burton, Zolkiewski, & Baines, 2017), and processes are often interconnected. This causes service recovery in the B2B industry to be more complex than that of the business-to-consumer (B2C) environment, and there are often prolonged periods before service failures get fixed. Service failure has a damaging impact on both the customer and firm (Zhu & Zolkiewski, 2015). Industrial B2B customers face multiple risks when service failure harms their business in terms of costs, time and emotions (Balaji, Roy, & Quazi, 2017; Hübner, Wagner, & Kurpjuweit, 2018), and perceived inequity worsens when the service failure harms other levels of the supply chain. When consumers experience dissatisfaction and negative behavioural responses (Balaji et al., 2017), firms risk losing these customers. Therefore, it is critical that companies understand customer service recovery requirements and align their recovery

efforts accordingly. Even though scholars have investigated this field extensively, knowledge within the B2B context is limited and contradictory, with even less being known about customer recovery expectations in a technical industry and emerging economic market.

In this study, recovery time refers to the period between when a customer lodges a complaint, or a service failure is recorded, and the final resolution offered by the firm. Recovery time is an important aspect of the service recovery process (Cambra-Fierro, Melero, & Sese, 2015; Fang, Luo, & Jiang, 2013; Hogueve, Bilstein, & Mandl, 2017; Mostafa, Lages, Shabbir, & Thwaites, 2015), although literature is limited and there are conflicting views on how to manage this period effectively. Certain scholars confirm the importance of speedy recovery time (Del Río-Lanza, Vázquez-Casielles, & Díaz-Martín, 2009; Fang et al., 2013; Hogueve et al., 2017), whilst others present opposing findings verifying the non-linearity of recovery time and recovery expectations (Gelbrich, Gäthke, & Grégoire, 2015). Zhou, Tsang, Huang and Zhou (2014) found that performing service recovery in the shortest time may not always be the best approach, further confirming the complexity around the dynamics of service recovery time. In this paper, recovery time will be considered as the dynamic period in which the service recovery process takes place.

During service recovery time, there is a zone of tolerance when customers' recovery expectations remain unchanged. This means that the firm can delay compensation for a certain period before customer anger levels increase, which directly leads to deteriorated justice perceptions and increased recovery expectations (Hogueve et al., 2017). Restoring customer perceived equity cost companies money, time and effort. Although extensive literature is available on recovery time (Hübner et al., 2018; Orsingher, Valentini, & De Angelis, 2010), differentiation of the zone of tolerance within service recovery time is a new concept that has only been explored in a B2C context, with no further knowledge on its significance in a B2B environment.

When complex service failures prevent a firm from improving recovery time, the only alternative strategy is to meet customer recovery expectations as best as possible during the service recovery period to extend the zone of tolerance. Recovery expectations can be described as the remedies customers expect from the company during this time (Boshoff, 2012). Justice theory is often used as a theoretical basis from which to explore customer recovery expectations in a certain service recovery context. Although scholars agree on the significance of the justice dimensions of interactional justice, distributive

justice, and procedural justice as drivers of the service recovery process, there are inconsistencies regarding what type of compensation should be offered, how it should be offered, how much should be offered, and when it should be offered to customers to restore perceived equity (Chen, Ma, Bian, Zheng, & Devlin, 2018). Miller, Craighead and Karwan (2000) proposed a three-phase framework that positioned customer recovery expectations within the “pre-recovery phase” (p. 388). However, the linearity of this model prevents the inclusion of the zone of tolerance, as customer satisfaction is only considered at the end of the three recovery phases, and clients’ varying expectations, emotions and behavioural intentions during the service recovery process are not considered. Given the importance of recovery expectations and the richness of service recovery literature within the B2C context (Chen et al., 2018; Cheung & To, 2016; Mostafa et al., 2015; Roschk & Gelbrich, 2014), the scarcity of empirical evidence on recovery expectations in the B2B framework is surprising. In addition to this gap in the literature, the findings by Hogleve et al. (2017) regarding the recovery zone of tolerance challenge the static perspective that recovery expectations are a fixed set of requirements that the firm must meet to deliver fair service recovery outcomes. Although literature confirms the multidimensional aspect of remedies pertaining to service failures (Miller et al., 2000), this leads to further questions on what the customer recovery expectations are during the zone of tolerance as well as which of the recovery expectations are most critical for customers.

Van Vaerenbergh and Orsingher (2016) state that although service recovery is seen as a mature research area, “this significant body of research has had relatively little impact on organizational service recovery policies” (p. 328). A large component of research in service failure and recovery focuses on a B2C context, and scholars acknowledge that empirical research in a B2B environment is lacking (Bardauskaite, 2014; Zhu & Zolkiewski, 2015). It is argued that service recovery time is dynamic (Fang et al., 2013), and with customer expectations seemingly different during the zone of tolerance, this area of the service recovery process requires further exploration. A brief explanation follows to describe the context of the study.

### **1.3 The commercial environment**

Barakat, Ramsey, Lorenz and Gosling (2015) confirm that emerging markets have been neglected in the research field, and scholars need to be cognisant of how cultural and economic factors may influence how customers perceive justice differently. One such market is South Africa with its many underlying diversities, hence it can be argued that

findings of current service recovery literature should be empirically tested within the South African business environment.

Emerging economies are known to have high investments in infrastructure, leading to many commercial opportunities in the construction and engineering industry. Returning confidence in the South African commercial property landscape is causing an increase in investment in the realty sector ("JLL SA", 2018). In 2016, the commercial property sector was valued at R1,3 trillion ("SA property market", 2016). In addition to the private sector, the South African Department of Trade and Industry has invested strongly in the refurbishment of industrial parks to stimulate economic transformation and employment creation ("Dti to spend R415m", 2018). With the National Development Plan (National Planning Commission, 2011) as the driver, the South African public-sector has allowed a R580 billion spend on the improvement and expansion of administrative, educational and health infrastructure during the 2017/2018 budget period (National Treasury, 2017). These properties require heating, ventilation and air conditioning (HVAC), as well as building automation and controls systems (BACS) to ensure the inhabitants' safety, comfort and optimal productivity. Therefore, it can be stated that companies providing such equipment, systems and related services face promising business opportunities. The HVAC market in South Africa is worth \$312 million, an equivalent of R3,7 billion (BSRIA, 2018). In 2016, the BACS market in the Middle East and Africa was valued at an estimated \$800 million, an equivalent of R10 billion (BSRIA, 2016).

The purchasing of HVAC and BACS equipment and related systems includes complex buying motives with multiple actors involved as either influencers or decision makers. High levels of investment take place to retain and capture new clients. Due to the extensive life cycle of HVAC and BACS equipment, suppliers usually have long-standing relationships with customers. Although scholars have proven the positive impact of affective relationships on customer satisfaction (Cambra-Fierro et al., 2015; Hess, Ganesan, & Klein, 2003), retention is not guaranteed. Globalisation, technological advancement and the growing trend of manufacturers adopting a servitization model are intensifying competition within the market (Baines & Lightfoot, 2013; Story et al., 2017; Zhu & Zolkiewski, 2015). When firms win service maintenance contracts for industrial equipment, it is imperative that their service recovery strategies align with customers' recovery expectations to ensure retention of these hard-earned clients. Frequent service failures and poor service recovery can worsen customer perceived inequity, which can lead to a loss of contracts and future sales. In addition to these pressures, social media amplifies the voice of the customer. Therefore, even in the case of a collaborative

relationship where high switching costs might prevail, the company must continuously refine its service recovery mechanisms to manage customer anger levels to keep recovery expectations as low as possible and limit negative word of mouth. By understanding customers' recovery expectations in the service recovery zone of tolerance and aligning service recovery mechanisms with these expectations, the firm can manage customer anger levels to avert increased recovery expectations, and limit further economic losses by preventing overcompensation to customers.

#### **1.4 Research objectives**

The main purpose of this study is to uncover customers' recovery expectations during the service recovery zone of tolerance following a service failure in a B2B environment.

This research aims to:

1. Discover the drivers that influence the duration of the service recovery time zone of tolerance in a B2B environment.
2. Uncover customer recovery expectations during the service recovery time zone of tolerance in a B2B context.
3. Identify the most critical customer recovery expectations during the time zone of tolerance in a B2B framework.
4. Explore how meeting these customer recovery expectations will influence customers' behavioural intentions.

#### **1.5 Scope of the research**

This research investigates customers' recovery expectations during the service recovery time zone of tolerance in the industrial B2B environment, where intermediate-type services are provided to the consumer by means of "scheduled maintenance, technical help-desk, repair, overhaul, delivery to site, operator training, condition monitoring, in-field service" (Baines & Lightfoot, 2013, p. 5). A wide variety of industries are represented within the Gauteng and KwaZulu-Natal provinces in South Africa – thus the scope of the research in these regions represents similar environments throughout the globe. The relevance of research outcomes may be valuable to business not only within the bounds of this province, but other regions and countries as well. Within the context of this study, the customers are employees or contractors of large business sectors, such as commercial property groups and manufacturing plants. These individuals are

responsible for the operations of industrial equipment in the buildings or as part of a manufacturing plant. They deal directly with service providers and experience service failure and recovery on a regular basis. Through the lens of equity and justice theory, the literature examines how to limit the extent of customer perceived inequity during the time zone of tolerance by determining the drivers of this tolerance period, as well as the recovery expectations of customers during this period. Moreover, the study will explore how customers' behavioural intentions are affected as an outcome of the way in which this time zone of tolerance is managed by the firm in an industrial B2B context.

## **1.6 Conclusion**

Extant literature provides a clear understanding of customer recovery expectations within certain industries and contexts, except for the fact that customer negative emotions remain flat during the time zone of tolerance. There is limited knowledge on the service recovery expectations customers hold within this period. The meaning of the time zone of tolerance within service recovery is a newly explored concept, and the value of understanding recovery expectations as well as the drivers that can positively influence the time zone of tolerance is recognised. Current literature presents service recovery expectations in one dimension of service recovery time. This leads to the interpretation that the same recovery actions can be implemented throughout the service recovery period to ensure positive customer behavioural intention. However, based on the findings by Hogueve et al. (2017), it is argued that customer service recovery expectations differ within the time zone of tolerance, and should be viewed as a multidimensional mechanism of the service recovery process. Therefore, service recovery expectations are dynamic in the service recovery period. Given the problem statement and literature reviewed, gaining a deeper understanding of customer service recovery expectations and the preceding drivers that influence these during the time zone of tolerance hold both economical and theoretical value.

Findings generated from this research project could potentially provide deeper insight on how firms can align their service recovery strategies with customer service recovery expectations, and optimally manage this tolerance period that will limit economical and psychological losses to both the customer and the firm.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 Introduction**

This study approached the research problem with equity and justice theory used as valuable frameworks to explore customer dynamics in service recovery (Kim, Ok, & Canter, 2012). An extensive literature review was conducted to better understand the factors that influence customers' service recovery expectations during the time zone of tolerance, what these service recovery expectations are during this tolerance period, and the potential impact on customers' behavioural intentions.

Section 2.2 critically assesses equity theory in service failure and recovery, and proceeds with an explanation of the nature of service and recovery within a B2B environment to highlight challenges unique to this domain. B2B literature mostly focuses on one or two moderating factors of service recovery actions, service recovery actions structured within the justice dimensions, and the service recovery outcomes in the form of customer satisfaction or behavioural intentions. Except for Miller et al. (2000), who investigated four antecedents of service recovery expectations from the perspective of the customer, it was observed that scholars usually approach this research field from the firm's perspective, neglecting to research the problem from the client's viewpoint, as was done with this study. Section 2.3 explains the role of time within a service recovery context and defines the significance of the recovery zone of tolerance in relation to customer service recovery expectations. As time was defined differently throughout literature, its meaning in this research paper is clarified. The zone of tolerance has been acknowledged within the service quality literature, although only recently surfaced in the service recovery domain. Literature was reviewed to gain further knowledge of the zone of tolerance and the factors that were found to influence this period within certain contexts. It became evident that further exploration of this dimension within service recovery time was required to gain a deeper understanding of its value during the service recovery process. Section 2.4 contains a review of literature on customers' service recovery expectations, compensation mechanisms and the related factors that influence these expectations within the framework of equity and justice theory. Most of the service recovery literature portrayed recovery actions from the firm's perspective and neglected to investigate recovery service recovery expectations from the customer's standpoint. The study by Miller et al. (2000) was one of the few to broach "service recovery expectations" (p. 388). Due to limited literature regarding customer service recovery

expectations, service recovery actions were included in the literature review to gain an understanding of the existing compensation methods acknowledged by scholars. Section 2.5 reviews how the time zone of tolerance influences customers' behavioural intentions resulting from the way service recovery is handled.

## **2.2 Service failure and recovery**

Adams' equity theory and justice theory, which originate from social psychology, often form the basis of scholars' research into the service failure and recovery domain (Balaji et al., 2017; Harun, Rokonuzzaman, Prybutok, & Prybutok, 2018; Hess et al., 2003; Migacz, Zou, & Petrick, 2018; Mostafa et al., 2015; Orsingher et al., 2010; Pai, Yeh, & Lin, 2017; Roschk & Gelbrich, 2014). In terms of equity theory, the service process is described as a social exchange where the outcome-input ratio of the customer is equal to the outcome-input ratio of the firm, and the outcomes and inputs can be financial or non-financial (Hogreve et al., 2017). Consumers evaluate the fairness of a company's service recovery strategy by means of a "mental cost-benefit analysis" (Mostafa et al., 2015, p.469). The three dimensions within justice theory that can influence customer behavioural intentions are reviewed in section 2.4.

Service failure is defined as "any situation where something has gone wrong" (Siu, Zhang, & Yau, 2013, p. 676), which "does not match consumer's expectations" (Wong, Newton, & Newton, 2016, p. 63), and "leaves customers feeling less than positive about the experience" (Migacz et al., 2018, p. 83). When service failure occurs, customers perceive an unequal distribution of their outcome-input ratio compared to the outcome-input ratio of the firm, and take action to restore equity (Siu et al., 2013). The state of inequity in this exchange (Fang et al., 2013; Hogreve et al., 2017; Sabharwal, Soch, & Kaur, 2010) leads to economic and psychological resource loss, negative emotions (Balaji et al., 2017), and negative behavioural intentions (Sengupta, Balaji, & Krishnan, 2015; Siu et al., 2013), and the firm is required to implement a service recovery strategy to restore equity within the customer-firm relationship.

Smith, Bolton and Wagner (1999) described service recovery as the process where "the organization attempts to provide a gain, in the form of recovery effort, to make up for the customer's loss" (p. 357). Fang et al. (2013) more elaborately explained service recovery as "a dynamic process of engaging in various marketing activities to recuperate consumer satisfaction after the service does not meet customer expectation or tolerance zone" (p. 341). The effectiveness of the service recovery effort will influence how



customers perceive justice and their level of satisfaction (Smith et al., 1999), which will impact their behavioural intentions in a positive or negative way (Mattila, Hanks, & Wang, 2014).

### ***2.2.1 Service failure in a B2B environment***

Services are intangible and, due to the diversity of interaction between customers and firms, service failures occur frequently (Migacz et al., 2018). Within an industrial B2B environment, a high level of relational exchange is at play, which requires strong emotional involvement between the customer and the company (Antioco, Moenaert, Lindgreen, & Wetzels, 2008). Service failure in a B2B environment is dynamic (Zhu & Zolkiewski, 2015) and can cause catastrophic disruption to a customer's production, which may lead to economic and social loss of resources (Cambra-Fierro et al., 2015; Smith et al., 1999). The client's supply chain can also suffer losses via a network or domino effect (Hübner et al., 2018; Zhu & Zolkiewski, 2015). Economic loss can be in the form of money and time, and social loss can be damaged status or esteem (Smith et al., 1999). In the B2B environment, service failures are often caused by flawed technical service and/or functional service where the quality of the service was inadequate, or the way the service was delivered was defective (Zhu & Zolkiewski, 2015). To restore equity within the customer-firm relationship, the firm must understand the customer's service recovery expectations and manage the drivers of these expectations to limit compensation costs to both the customer and firm. Current literature presents conflicting findings regarding customer service recovery expectations, especially in a B2B environment.

### ***2.2.2 Service recovery in a B2B environment***

Zolkiewski et al. (2017) described the B2B environment as consisting of "multiple actors, interacting in different ways with different sets of objectives depending on their role (e.g. buyer versus user) and different individual perceptions" (p. 173). As such, transference of B2C principles to B2B holds limitations due to different context and complexities that accompany the B2B domain (Zhu & Zolkiewski, 2015). Where high dependency relationships prevail, customers usually face high switching costs (Bardauskaite, 2014), and sometimes are hesitant to switch to another service provider due to inertia or fear of change (Hübner et al., 2018). Although high switching costs ensure the retention of consumers for a certain period, the firm should ensure customers do not feel trapped in

a business relationship, as the negative emotions clients experience can harm the customer-firm relationship (Bardauskaite, 2014). Companies generate far higher profits from existing customers than from new accounts (Doney, Barry, & Abratt, 2007). Therefore, the firm's first focus should be to retain current customers. When a client loses trust in a company and switches suppliers when equipment is due for replacement, it creates a capitalising opportunity for competitors and will lead to loss of customer lifetime value and long-term profits (Allen, Brady, Robinson, & Voorhees, 2015). Consequently, it is evident that the business must have a strategy that effectively deals with customer service recovery expectations during service recovery time to ensure positive customer behavioural intentions towards the firm.

### **2.3 Service recovery time**

The time a firm takes to respond to a service failure is a significant mechanism of the service recovery process (Brock, Blut, Evanschitzky, & Kenning, 2013). In the literature reviewed, various terms related to time surfaced. These terms often had a slight difference in meaning, depending on their scope and positioning within the context of the literature. Cambra-Fierro et al. (2015) referred to "timeliness" (p. 112), which forms part of "response speed" (Hübner et al., 2018, p. 297). These phrases are more related to how fast the company responds when a service failure is reported by a customer, and do not include the whole service recovery period. Zhou et al. (2014) applied the phrase "response timing (immediate/delaying)" (p. 160) to the time the firm takes to resolve a service failure – "recovery time" (Hogreve et al., 2017, p. 868) was found to also align with this perspective. The term "speed of response" used by Mostafa et al. (2015, p. 471) combined both these concepts, which were discovered to be a too wide approach that could lead to multiple interpretations of the relevance of service time within a service recovery context. In this study, "service recovery time" will align with the definition by Hogreve et al. (2017), and refers to the period it takes a company to recover from a service failure and restore equity within the customer-firm exchange after a service failure took place.

Although most of the assessed literature confirmed the linearity between service recovery time and customer behavioural intentions, where a fast service recovery time will contribute to positive customer behaviour, certain scholars delivered conflicting results. Scholars who established the linear relationship between service recovery time and customer behavioural intentions include Mostafa et al. (2015), who found in a B2C study with telecom users in Egypt that a fast recovery time positively impacted customer

perceived justice. On the opposing side, a study that proved the non-linearity of service recovery time and customer behavioural intentions was that of Zhou et al. (2014), who found with their B2C study of non-critical services (in-class and online language education) that certain service failure situations could lend themselves to delayed response times, which implies that customers might not always expect an immediate service recovery response. Due to the criticality of many B2B services, the applicability of Zhou et al.'s (2014) findings to such a B2B environment is also questioned.

Hogreve et al. (2017) were the first to investigate customer service recovery expectations within service recovery time. They revealed that service recovery time influences customer behavioural intentions and impacts their compensation expectations. The non-linearity between compensation expectations and service recovery time was also proven, and the presence of a recovery time zone of tolerance was determined.

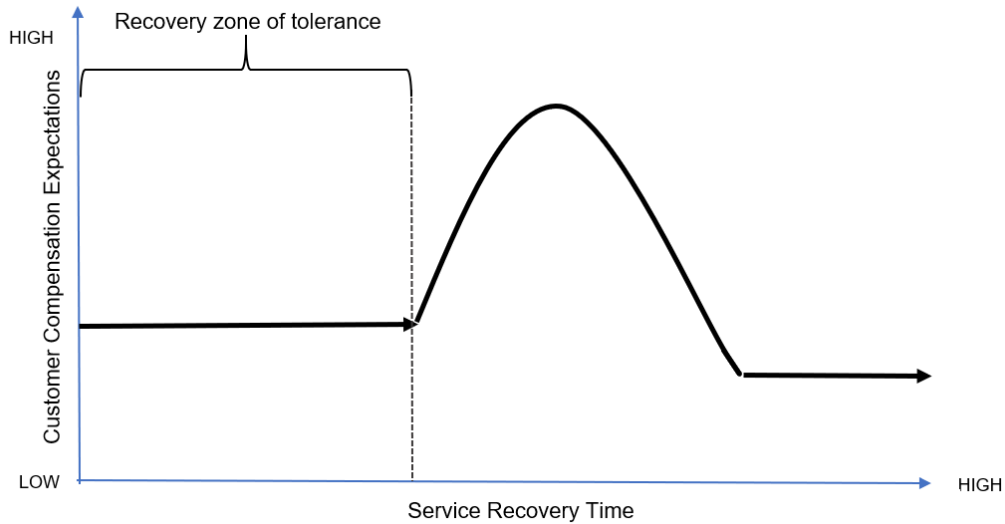
### ***2.3.1 The recovery time zone of tolerance***

Due to the scarcity of the concept “time zone of tolerance” (Hogreve et al., 2017, p. 871) within service recovery literature, a broader assessment of texts referring to the simpler term of “zone of tolerance” (Zeithaml, Berry, & Parasuraman, 1993, p. 5) was conducted. It was found that the term zone of tolerance originated in service quality literature. Zeithaml et al. (1993, p.5) defined this term as the willingness of customers to accept varying levels of service delivery, which are positioned between the “desired” (higher level of tolerance) and “adequate” (lower level of tolerance) levels of service that customers expect. Kim et al. (2012) explained the zone of tolerance as the continuum within which customer satisfaction will remain when service performance meets customer expectations but made no mention of recovery time. Although Baksi and Parida (2012) studied the Zeithaml et al. (1993) zone of tolerance framework within a service recovery context, and Fang et al. (2013) proved the dynamic time-varying effects in the service recovery process, it became evident that Hogreve et al. (2017) were the first scholars to verify the existence and value of a “time zone of tolerance” (p. 866) in a service recovery study. Despite this finding, the importance of gaining a comprehensive understanding of various aspects of this concept within prominent service quality and service recovery literature was acknowledged and consequently reviewed. Table 1 contains a summary and comparison of the literature reviewed to gain a deeper understanding of the zone of tolerance. It also shows the difference between Zeithaml et al.'s (1993) concept versus the time zone of tolerance defined by Hogreve et al. (2017).

**Table 1:** Summary of zone of tolerance literature review

Author(s)	Domain and context of study	Description of the zone of tolerance
Zeithaml et al. (1993, p. 6)	Service quality B2C and B2B various	The zone of tolerance "separates desired service from adequate service", "varies across customers" and "'expands or contracts with the same customer". The "adequate service level" has a bigger impact on the zone of tolerance than the "desired service level".
Walker and Baker (2000, p. 412)	Service quality B2C health clubs	Zeithaml et al. (1993) logic "A range of performance that the service consumer considers acceptable".
Miller et al. (2000)	Service recovery B2C various	Pre-recovery phase: this period would fall into the <i>time</i> zone of tolerance. Immediate recovery phase: partial or full period can fall into the <i>time</i> zone of tolerance.
Baksi and Parida (2012, p. 13)	Service recovery B2C banking	Zeithaml et al. (1993) logic "Desired" and "adequate" threshold levels differ per customer
Kim et al. (2012)	Service recovery B2C restaurant	Zeithaml et al. (1993) logic High-relational customers have a wider zone of tolerance than low-relational ones.
Fang et al. (2013, pp. 343-344)	Service recovery B2C mobile phone	Service recovery strategies are dynamic and have a time-varying effect on customer satisfaction. Can have a "short or long decay" and vary in "build-up intensity" and "timing of the peak impact".
Hogreve et al. (2017)	Service recovery B2C airline	Recovery time zone of tolerance. Compensation expectations remain flat during this period.

During the time zone of tolerance, customer compensation expectations remain stable in contrast to the remainder of the service recovery period when customer compensation expectations increase in line with an inverted U-shape pattern and eventually decrease (Hogreve et al., 2017). This finding is significant as it proved that service recovery time is dynamic and an important part of the service recovery process. If firms manage this period well, they can limit service recovery compensation costs. To further explain this concept, Figure 1 illustrates the positioning of the time zone of tolerance within the service recovery time dimension.



**Figure 1:** A graphic depiction of the recovery time zone of tolerance within service recovery time and the relationship with customer compensation expectations

Source: Hogleve et al. (2017)

It was found that current service recovery literature is inconclusive on the role of time within a service recovery context. Zone of tolerance has dominantly been used in a context of lower and higher thresholds of tolerance (Baksi & Parida, 2012; Walker & Baker, 2000; Zeithaml et al., 1993), and not within a context of service delivery time, as Hogleve et al. (2017) and this study have done. Hogleve et al. (2017) are the first within service recovery literature to empirically confirm the existence of a recovery time zone of tolerance in the service recovery period. B2B literature related to the time zone of tolerance is scarce. This led to questions on whether this concept applies to a B2B environment, and which drivers could influence the duration of this period.

### **2.3.2 Drivers of the time zone of tolerance**

A critical assessment of literature revealed various drivers that could influence the tolerance period a customer grants the firm to manage the service recovery process before their perceptions of inequity increase, their recovery expectations rise, and their behavioural intentions become negative. Based on the literature reviewed, these drivers were categorised into five main areas related to the nature of the service failure, the customer, the firm, the interrelated nature of the customer-firm relationship, and proactive measures.

Customers feel more vulnerable when they experience service failure of high severity

(Sengupta et al., 2015), thus their tolerance towards the service recovery process is argued to be lower than in the case of a non-severe failure. Failure severity is deemed a significant driver of the time zone of tolerance as it has been proven to impact the time a customer is willing to wait for service recovery (Miller et al., 2000). Although Zhou et al. (2014) described service types as either separated or non-separated, Baines and Lightfoot (2013) categorised service types more relevant to a B2B context as either “base services”, “intermediate services”, and “advanced services” (p. 5). Complex products and services lead to complex failures (Schmitz, Schweiger, & Daft, 2016) which can lead to extended recovery time. The recurrence of service failures can also impact the time zone of tolerance as customers become less tolerant when repeat failures occur (Fang et al., 2013; Hogreve et al., 2017).

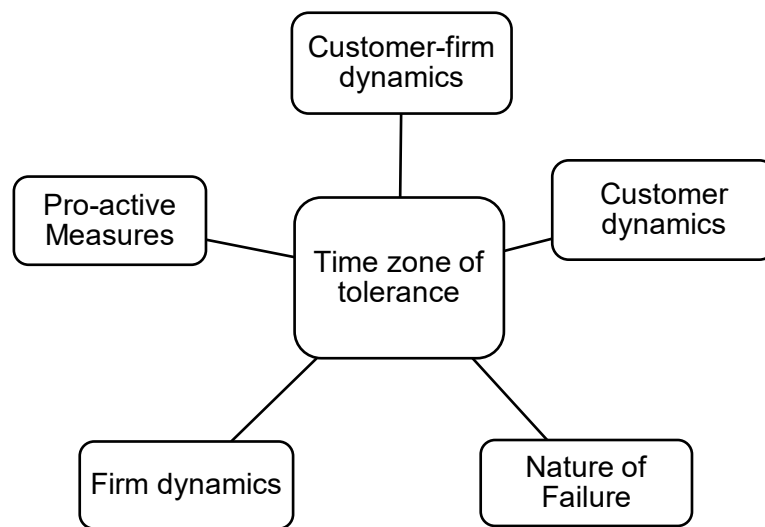
Within the customer’s own organisation, internal processes have been proven to impact service recovery expectations. Complex internal processes may lead to constrained purchase behaviour, which in turn can influence the recovery time zone of tolerance clients grant the firm to act on a service failure (Brock et al., 2013). From a psychological perspective, the emotional feelings experienced by the customer, such as powerlessness (Wong et al., 2016) and anger (Hogreve et al., 2017), have also been proven to influence this period (Balaji et al., 2017).

On the business’s side, multiple drivers could influence the customer’s tolerance towards the period in which service recovery is managed. Berry (2000) confirmed that service firms obtain strong “brand equity” (p. 130) when they are consistent in their service offering, consequently gaining clients’ trust. In a service recovery context in the travel industry, Sengupta et al. (2015) proved that “brand reputation” (p. 672) of a services company can impact customer recovery expectations. Therefore, it is argued that in a B2B context, the brand reputation of the firm can affect customer recovery expectations and it needs to be considered as a valid driver of the service recovery time zone of tolerance. In support of this, Mostafa et al. (2015) confirmed that the way a firm handles service recovery impacts its corporate image. A customer’s historical service experience (Hess et al., 2003; Zeithaml et al., 1993) and the firm’s perceived service quality (Chang, 2017; Zeithaml et al., 1993) have been acknowledged as firm-related factors that influence the client’s confidence levels in the company’s ability to handle the service recovery tolerance (Zhu & Zolkiewski, 2015), and are thus argued to be firm-related drivers of the time zone of tolerance. If customers perceive a firm to be competent and capable in his service delivery and managing of service failure and recovery, it will promote trust in the customer-firm relationship and can lead to positive customer

behaviours (Arlı, Bauer, & Palmatier, 2018).

Drivers within the dynamics of the interrelated customer-firm relationship have been proven to be important influences of the tolerance levels of consumers when a service failure has occurred (Baksi & Parida, 2012; Cambra-Fierro et al., 2015; Graca, Barry, & Doney, 2015; Hess et al., 2003; Hogreve et al., 2017). Relationship quality between the customer and firm has been found to influence customers' service recovery expectations, and as such could impact their tolerance towards the firm (Roschk & Gelbrich, 2017). When there is a close customer-firm relationship, clients are found to display more leniency towards the firm, leading to a longer time zone of tolerance than in the case of new consumers who did not have a close relationship with the service provider (Chang, 2017; Hogreve et al., 2017). Should the firm's recovery time exceed this time zone of tolerance, these high-relational customers experience anger due to perceived inequity, which results in elevated levels of compensation expectations towards the business (Hogreve et al., 2017). High switching costs or having limited options in alternative suppliers can lead to change inertia, and also influences the extent to which customers are willing to wait for service recovery (Hübner et al., 2018; Zhu & Zolkiewski, 2015). The importance SLAs mostly feature in banking, information systems and telecommunications studies (Ismail, Yan, & Shen, 2013), with a lack of related research in the industrial marketing arena. Drivers of contractual nature can formalise the expected service response and recovery time. Therefore, it is argued that the potential value of SLAs is to be recognised in serving as a mechanism to manage customer expectations and, consequently, the time zone of tolerance. In cases where reciprocal purchase agreements exist, a mutually dependent relationship can serve as a positive driver to the time zone of tolerance (Zhu & Zolkiewski, 2015). The complexity and dependency in a B2B customer-firm relationship often have a domino effect, which means a service failure could have a damaging effect on the customer's customer (Zhu & Zolkiewski, 2015). This would imply that the time zone of tolerance could be impacted based on the urgency or severity of failure in the supply chain network. Where intermediate or advanced services are provided, formal contracts or service level agreements (SLAs) with set service recovery times are often present (Boshoff, 2005). This may have implications on the time zone of tolerance, as it is anticipated that customer expectations would align with the times agreed upon. None of the literature reviewed could confirm this argument, so this driver deserves further exploration within the service recovery context. The literature reviewed was not clear on which of these drivers play the most important role in a B2B context, which served as additional motivation to proceed with this study.

Proactive measures in the form of preventive maintenance, system redundancy and spare parts availability have been identified as possible drivers of the time zone of tolerance. Qing, Hai, and Li, (2016) stated the importance of the accurate scheduling of preventive maintenance procedures to improve the reliability of machinery, and Droge, Vickery and Jacobs (2012) confirmed a “back-up system mitigated the severity of the failure and extended the recovery time, and contributed to the reliability of a system” (p. 250). Firms can improve their service recovery strategies and value to the customer by keeping spare parts on hand (Story et al., 2017). This could build customer trust and positively impact customer behaviour. Based on the assessed literature, Figure 2 is a graphical summary of the main identified drivers – customer-firm dynamics, customer dynamics, nature of failure, firm dynamics and pro-active measures - that impact the service recovery time zone of tolerance.



**Figure 2:** Drivers of the time zone of tolerance

## 2.4 Service recovery expectations during the time zone of tolerance

Service recovery actions in marketing have been well explored, although the B2C environment has received far more focus than the B2B environment. Brock et al. (2013) confirmed that the lack of empirical studies limits the understanding of customer recovery expectations within the B2B environment. What is still unknown is what service recovery



mechanisms customers expect during the time zone of tolerance to extend this grace period and limit their potential negative behavioural intentions. This section contains an explanation of service recovery actions within the theoretical foundation of justice and equity theory as assessed in the literature. The recovery time zone of tolerance has been proven to be a significant period during the service recovery process where customer compensation expectations within the distributive justice dimension remain unchanged (Hogreve et al., 2017). However, although compensation expectations stay flat during this period, questions on what specific service recovery mechanisms customers require in the interactional justice and procedural justice dimensions to extend the time zone of tolerance remain unanswered, serving as motivation for this study's second research question.

### ***2.4.1 Customer perceived justice during service recovery***

Hess et al. (2003) described perceived justice as “beliefs about the level of repatriation that is appropriate after a service failure” (p. 131). The importance of understanding customers’ perceived justice needs during service recovery is critical to implementing effective recovery strategies (Gonzalez, Hoffman, & Ingram, 2014). Service recovery mechanisms occur within the dimensions of distributive justice (Cheung & To, 2016; Del Río-Lanza et al., 2009), procedural justice (Del Río-Lanza et al., 2009), and interactional justice (Shin, Casidy, & Mattila, 2018; Siu et al., 2013). These interrelated justice dimensions drive service recovery and affect customer satisfaction (Del Río-Lanza et al., 2009). Certain literature touched on all dimensions, whilst other research tested some dimensions through different theoretical lenses and in relation to other moderating aspects, such as relationship strength (Cambra-Fierro et al., 2015), relationship length (Hogreve et al., 2017; Zhu & Zolkiewski, 2015), relationship type (Gelbrich, Gätke, & Grégoire, 2016), role stress, and job resources (Yang, Lee, & Cheng, 2015). In this study, these moderating aspects serve as drivers that could influence the time zone of tolerance, as discussed in section 2.3.2. Even though literature is rich on the related service recovery mechanisms within these justice dimensions, the question remains: what level of repatriation is required during the time zone of tolerance whilst the service recovery is in process?

### ***2.4.2 Recovery expectations within the distributive justice dimension***

Distributive justice perceptions relate to how fair a customer perceives compensation to be (Del Río-Lanza et al., 2009). Gelbrich et al. (2015) defined compensation as “a tangible benefit that firms provide to redress a flawed service” (p. 108). However, Roschk and Gelbrich (2014) took a more holistic stance by explaining compensation as “a resource that recompenses customers for a resource they lost due to the organization’s failure” (p. 195). Compensation expectations are described as the remedies consumers expect from the provider during service recovery time (Boshoff, 2012). Roschk and Gelbrich (2014) state that compensation types are influenced by the point in time, however this compensation model cannot be adopted into the B2B environment due to process and relational complexities. The concept of compensation is interpreted in various ways, thus it must be confirmed that in the context of this study, compensation is associated with both tangible and intangible aspects (Roschk & Gelbrich, 2014). The aim of tangible and intangible compensation is to restore equity within the customer-firm

exchange relationship and ensure consumers perceive fairness after the service recovery is completed (Fang et al., 2013). Forms of tangible compensation relevant to the B2B environment are exchanges, repairs (Van Vaerenbergh & Orsingher, 2016), a discount on a future transaction (Roschk & Gelbrich, 2014; Van Vaerenbergh & Orsingher, 2016), a credit note on the customer account (Roschk & Gelbrich, 2014), an immediate discount on the original transaction price (Roschk & Gelbrich, 2014), gifts (Bambauer-Sachse & Rabeson, 2015a), or a combination of these (Van Vaerenbergh & Orsingher, 2016). Some of these compensation mechanisms can happen immediately, whilst others provide a delayed form of compensation (Roschk & Gelbrich, 2014). Bambauer-Sachse and Rabeson (2015b) determined, in a B2C environment, that people from different cultures (individual versus collectivist) have varying tangible compensation expectations that lead to narrower or wider zones of tolerance. People from an individualist culture are more demanding and have higher compensation expectations than those from a more collectivist culture. South Africa is a fusion of developing and developed economies, and individualist and collective cultures, thus caution is taken before adopting findings from these studies.

Certain scholars have challenged the effectiveness of financial compensation in certain situations (Basso & Pizzutti, 2016), positioning interactional justice mechanisms like communication (Fang et al., 2013) and procedural justice mechanisms like response speed (Hübner et al., 2018) and initiation (Hübner et al., 2018) as more effective service recovery actions. The two sections that follow explain interactional justice and procedural justice mechanisms in a service recovery context.

### ***2.4.3 Recovery expectations within the interactional justice dimension***

Interactional justice is related to the human factor in the form of communication and emotions, and the way customers are treated during the recovery process (Orsingher et al., 2010). Mechanisms impacting customers' perceptions of interactional justice include communication (Cambra-Fierro et al., 2015; Graca et al., 2015) like an apology (Cheung & To, 2016; Fang et al., 2013; Miller et al., 2000) and explanation of the problem (Cheung & To, 2016; Roschk & Gelbrich, 2014; Sengupta et al., 2015). Psychological factors, such as being treated with empathy and politeness (Miller et al., 2000; Mostafa et al., 2015; Van Vaerenbergh & Orsingher, 2016), also serve as drivers of interactional justice. Roschk and Kaiser (2013) and Basso and Pizzutti (2016) affirmed that an apology can be just as effective as financial compensation. According to Hess et al. (2003), it is important for the firm to acknowledge when there is an issue. This relates to being honest

with the customer, regardless of how bad the service failure might be (Siu et al., 2013). Treating the client with empathy has been proven to restore customer satisfaction (McColl-Kennedy & Sparks, 2003; Roschk & Kaiser, 2013). Status updates (Hogreve et al., 2017) on what is being done about the problem and the progress of service recovery can help the customer feel less vulnerable, resulting in an extended time zone of tolerance, inhibited negative behavioural intentions and maintained customer perceived justice (Mostafa et al., 2015). Further, Hogreve et al. (2017) proved communication is an important moderator to the time zone of tolerance, but warned against the “too-much-of-a-good-thing effect” (p. 881), which can worsen the situation.

#### ***2.4.4 Recovery expectations within the procedural justice dimension***

Procedural justice refers to how fair a customer perceives the “decision-making procedures” (Barakat et al., 2015, p. 113) to be during the service recovery process. From an equity perspective, it can be explained that service recovery waiting time causes an imbalance between the clients’ own outcome-input ratio and that of the firm. Besides possible financial costs, consumers can also incur psychological costs due to pressures from within their operations and supply chain network. Literature indicated that the longer the firm takes to restore equity, the more customer compensation expectations increase (Hogreve et al., 2017). Therefore, the company must give this mechanism a lot of focus within its service recovery strategies. Consequently, it can be said that satisfactory timeliness and responsiveness of recovery actions (Hübner et al., 2018) can heighten customers’ perceptions of procedural justice (Smith et al., 1999), thus positively impacting their behavioural intentions towards the service provider. Other service recovery mechanisms related to procedural justice are response speed (Hübner et al., 2018; Siu et al., 2013), being pro-active before the customer lodges a complaint (Hübner et al., 2018; Sengupta et al., 2015), “quality improvement” to ensure the failure does not happen again (Fang et al., 2013, p. 342), and “supervisor intervention” when service recovery needs to be escalated for additional support (McColl-Kennedy & Sparks, 2003, p. 259). A mechanism that influences a client’s perception of procedural justice is the way a company is able to provide a flexible solution to the service failure (Siu et al., 2013; Van Vaerenbergh & Orsingher, 2016) – that is, the ease of reporting a service failure and how quickly this matter is attended to and resolved. In their B2B study within the construction industry, Brock et al. (2013) found that customers cared more about the way a service recovery was done than by whom – therefore, procedural justice dimensions were more important than interactional justice dimensions.

It can be argued that there is still no clear understanding of the mechanisms that impact customers' recovery expectations within the time zone of tolerance, and Fang et al. (2013) confirm the scarcity of literature with a dynamic view on service recovery activity. Although literature on which justice dimensions could be dominant during the time zone of tolerance was inconclusive, it was clear that customers' behavioural intentions are impacted in either a positive or negative way as a result of the service recovery process.

## **2.5 Customer behavioural intentions**

Zeithaml, Berry and Parasuraman (1996) described customer behavioural intentions as "signals of retention or defection" (p. 32). The way a firm manages service recovery impacts customers' behavioural intentions. Perceived equity can lead to positive behavioural intentions, which can be in the form of clients' "continued patronage", also commonly referred to as "word-of-mouth referrals" (Mattila et al., 2014, p. 560) and "repurchase intentions" (Van Vaerenbergh, Larivière, & Vermeir, 2012, p. 262). A company's brand image has been proven to influence behavioural intentions, and can serve as a "short-term benefit to diminish failure outcomes" (Sengupta et al., 2015, p. 672). Baksi and Parida (2012) also found that psychographic factors like trust and loyalty impact behavioural intentions. If customers are satisfied with the firm and the way service recovery is managed, perceived justice will result in positive behavioural intentions (Siu et al., 2013). Fang et al. (2013) confirmed the importance of effective service recovery strategies to ensure customer satisfaction and, consequently, retention and positive word of mouth. This is because consumers have been found to be more understanding towards service failures than the firm's failure to fix the failure. The value of co-creation is receiving increasing attention from scholars as this can contribute towards perceived justice (Silva, Broilo, Espartel, & Basso, 2017).

Negative customer behaviour can be displayed as negative word of mouth and switching to another supplier (Kim & Jang, 2016). Adverse customer responses in the form of frustration (Zhu & Zolkiewski, 2015); anger (Hogreve et al., 2017; Surachartkumtonkun, McColl-Kennedy, & Patterson, 2015); and, in extreme cases when repeated ineffective service recovery takes place, rage (Surachartkumtonkun et al., 2015), will lead to negative word of mouth, possible customer defection, as well as increased compensation expectations (Hogreve et al., 2017). Therefore, it is critical that the firm effectively manages the time zone of tolerance to ensure positive behavioural intentions and limits customer compensation expectations.

## **2.6 Conclusion**

Literature was inconclusive on how industrial customers expect the firm to handle the service recovery process or how they evaluate perceived equity (Brock et al., 2013). This chapter reviewed literature related to service recovery, with a specific focus on the time zone of tolerance. It described the additional service recovery challenges faced within a B2B context. The multidimensional character of service recovery time was brought to the surface of the discussion. Insights into the recovery time zone of tolerance (Hogreve et al., 2017) and the significance of this concept as part of the service recovery process were also presented. Furthermore, the drivers of the time zone of tolerance were explored, which were summarised in Figure 2 as further explanation. Customer recovery expectations within the three perceived justice dimensions were presented, with the final section describing the relevance of customer behavioural intentions within the time zone of tolerance. Figure 3 presents the model that aligns with the research questions and was used for analysis in the following chapters.

## **CHAPTER 3: RESEARCH QUESTIONS**

This study aims to find answers to the below four research questions.

### **Research question 1**

*What drivers influence the duration of the service recovery time zone of tolerance within a B2B environment?*

The time zone of tolerance is a new concept, and little is known on which drivers influence the duration of this tolerance period. The need therefore exists to further explore this domain to gain a deeper understanding of the value it might hold for scholars and business.

### **Research question 2**

*What are the customer recovery expectations (distributive, interactional and procedural) during the service recovery time zone of tolerance within a B2B environment?*

If firms have a better understanding of the critical service recovery mechanisms that customers require during the zone of tolerance, clients' behavioural intentions can be managed better, and potential compensation losses limited to both customers and firms.

### **Research question 3**

*What are the most critical customer recovery expectations (distributive, interactional and procedural) during the time zone of tolerance within a B2B environment?*

Literature has proven an array of possible mechanisms that can impact recovery expectations. However, it is unclear which of these mechanisms are preferred during the time zone of tolerance within the context of a B2B environment. Both the customer and firm will gain if the firm focused on the mechanisms that had the most value to the customer during this tolerance period.

#### **Research question 4**

*If customer expectations are met within the time zone of tolerance, how will this influence their future behavioural intentions?*

Customer satisfaction will be influenced by the way the firm handles the service recovery, impacting their purchasing behaviour, word of mouth, and willingness to co-create service recovery actions. Reciprocal behaviour towards the firm may also occur. Value will be gained if the firm understood how meeting their customer's service recovery expectations can impact future behavioural intentions.



## **CHAPTER 4: RESEARCH METHODOLOGY**

### **4.1 Introduction**

An exploratory study serves a valuable purpose when a certain phenomenon needs to be understood (Saunders, Lewis, & Thornhill, 2016). A qualitative research approach was followed to address the knowledge gap regarding the time zone of tolerance within a B2B environment, customer service recovery expectations during this period, and how meeting these expectations influences customers' behavioural intentions. Qualitative research allows scholars to gain further understanding on how people interpret experiences to explain their behaviour (Merriam & Tisdell, 2016), and enabled the researcher to answer the research questions truthfully (Schurink, 2009). In the business and management area, Myers (2013) believes a trustworthy qualitative research approach nurtures collaboration between scholarship and practice, which is exactly what this study intended to pursue.

The research methodology and design are explained in the following sections. The population, unit of analysis, and sampling method and size align with the scope mentioned in section 1.5 of Chapter 1. In section 4.6, the data collection tool is described, while section 4.7 explains how data will be gathered and the method applied, with section 4.8 then describing how the data will be analysed. Sections 4.9 and 4.10 explain how rigour, trustworthiness and ethical compliance of data were ensured. Section 4.11 considers the limitations that accompany this research design.

### **4.2 Research methodology and design**

The research design, sampling and analysis of the data aligned with an interpretivist philosophy (Lindgreen, Palmer, Vanhamme, & Wouters, 2006; Myers, 2013) to allow for the discovery of the drivers of the time zone of tolerance, customer service recovery expectations within this tolerance period, and the behavioural intentions as a result of how these compensation expectations are met. The qualitative research approach aimed to determine the thoughts and emotions of people at a level deeper than a quantitative method can establish, and was found to be the most appropriate method to investigate complex service recovery processes (Lindgreen et al., 2006).

An inductive approach was followed to develop a deeper understanding of current theoretical perspectives (Saunders et al., 2016). The inductive reasoning in the context

of a qualitative study tends to be more explorative and is relevant when a researcher has a “bottom-up” approach and wants to build theory from empirical data (Myers, 2013).

A mono-method exploratory research design was accompanied by a single data collection technique (Saunders et al., 2016). Data was collected from individuals employed by business customers within the industrial B2B environment. These individuals were responsible for industrial HVAC systems and/or BACS in commercial buildings or manufacturing plants. Nine of these individuals were based in the South African province of Gauteng, and three were from KwaZulu-Natal. Equipment service failures occur often, leaving these consumers reliant on service providers to restore machinery to working condition. This study focused on customers (in this context, companies) who have experienced service failures at least once in the past six months to ensure that the participants have an accurate recollection of the service failures. The exploratory approach provided an open platform for individuals to describe their recovery expectations during the time zone of tolerance and the subsequent influence on their behavioural intentions, such as reciprocity and word of mouth.

### **4.3 Population**

In this study, the population can be described as all the individuals who work in a B2B context and are responsible for the operations and maintenance of industrial equipment of commercial buildings and manufacturing facilities. These individuals are also referred to as “actors” in industrial marketing literature (Story et al., 2017, p. 55). The actors are usually operational in the roles of central plant operator, facility manager, maintenance engineer or any other position responsible for the upkeep of industrial equipment. These actors deal directly with the service provider, who is contracted to provide intermediate services in the form of scheduled maintenance; condition-based monitoring; and in-field service, repair and overhaul of equipment (Baines & Lightfoot, 2013). Criteria for selecting the interview sample included:

- a) B2B customers within an industrial environment;
- b) B2B customers who receive intermediate services from a service provider
- c) B2B customers who are responsible for the operations of HVAC and/or BACS equipment; and
- d) B2B customers who experienced service failures in the past six months.

### **4.4 Units of analysis**

The units of analysis were actors in roles as described in sections 4.3 and 5.2. These actors represent the population and have experienced a service failure during the past six months.

#### **4.5 Sampling method and size**

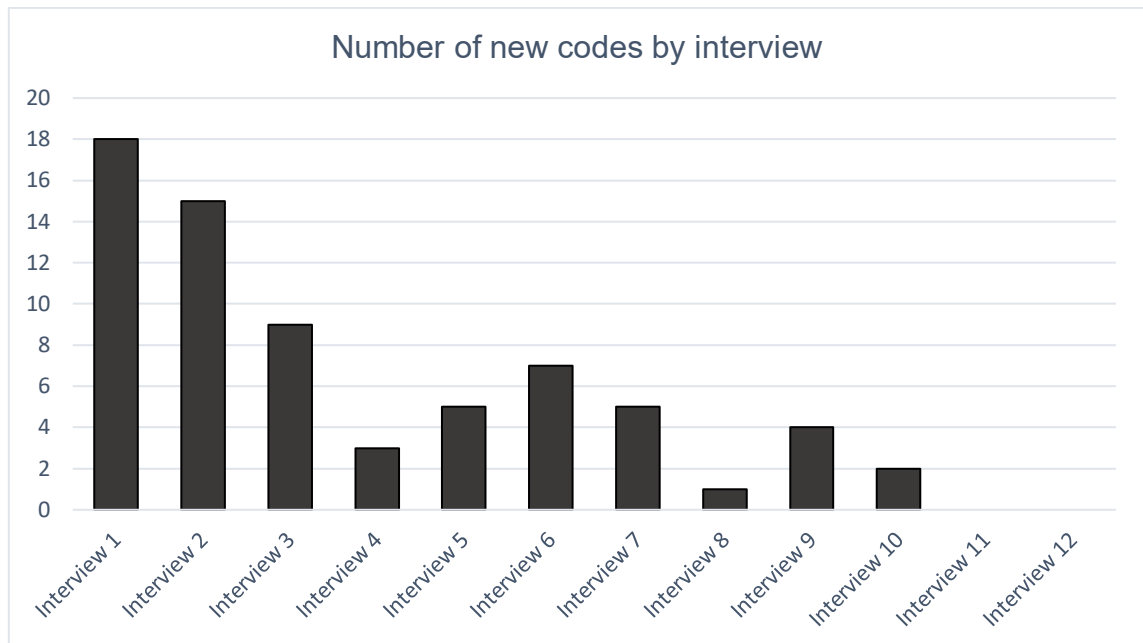
A typical purposeful sampling approach was followed to ensure participants bring insight into the topic under study. Typical purposeful (also referred to as purposive) sampling (Merriam & Tisdell, 2016) is a method where participants who fit the typical characteristics of the population are selected and deemed to be a fair representation of the sampling unit of this research project (Zimmerman, Lewis-Beck, Bryman, & Liao, 2011). The participants were selected before data was gathered, which also aligns with a purposeful sampling approach (Merriam & Tisdell, 2016).

A list of service customers of a multinational firm representative of the building technology industry was obtained. This company provides intermediate services (as described in section 4.3) to customers with HVAC and/or BACS in their buildings. Written permission to access customers' information was obtained from the service provider (see Appendix A). A customer list was extracted from the firm's enterprise resource planning system and provided in electronic format to the researcher. This customer list contained the names and contact details of all the service business customers. Screening of actors was done to ensure they met the population criteria as described in section 4.3. The provided customer list was reviewed, and potential participants were contacted telephonically. To ensure potential participants experienced a service failure during the last six months and that they acknowledged the relevance of service recovery time, the following screening questions were asked:

- a) Have you experienced a service failure of plant equipment during the last six months? (If the answer is "yes", ask the next question. If the answer is "no", end the call.)
- b) In general, are you willing to accept the fact that it can take some time to resolve a service failure? (If the answer is "yes", schedule a face-to-face interview. If the answer is "no", end the call.)

An initial sample size of 15 participants was selected. However, based on the coding and analysis as original primary data collected, the number of participants changed as saturation was achieved during the analysis process. The researcher recorded each new code as presented in figure x This approach aligned with the recommendation of Merriam

and Tisdell (2016) that purposeful sampling be conducted until no new information or codes surface during data analysis and a point of saturation has been reached.



**Figure 3:** Number of new codes by interview

#### 4.6 Data collection tool

In a qualitative study, the most common method to gather historical data is via face-to-face interviews. Interviews can be described as conversational events with the purpose to “obtain a special kind of information” and can be highly structured, semi-structured and unstructured (Merriam & Tisdell, 2016, p. 108). Saunders et al. (2016) explain that during the semi-structured interview process, “the interviewer commences with a set of interview themes but is prepared to vary the order in which questions are asked and to ask new questions in the context of the research situation” (p. 728). Semi-structured interviews allow for flexibility in the way questions are asked, permit superfluous discussions that might produce additional data, and are the best suited data collection approach when questions are open-ended or complex (Saunders & Lewis, 2012). In addition, Saunders and Lewis (2012) confirm that participants are more willing to participate in interviews than complete questionnaires, as they do not have to write anything. Therefore, gathering data by means of semi-structured interviews was deemed the most suitable approach to conduct this study. An interview guideline (see Appendix C) was created to serve as a data collection tool when the semi-structured interviews were conducted.

Semi-structured questions in the interview guideline facilitated the process of obtaining specific data regarding customer compensation expectations and their behavioural intentions during the zone of tolerance. Regarding Table 2, the interview questions were constructed and mapped against the research questions to ensure alignment with the research objectives and consistency with constructs reviewed in the literature.

The interview guideline starts with an introduction and explanation of the main constructs to set the tone of the interview and ensure participants understand the context of the questions. Well-chosen, open-ended questions that align with the research questions were asked. Based on pre-discussion and questions as per the interview guideline in Appendix C, interviews were anticipated to last approximately 60 minutes. All handwritten notes taken during the interviews and the audio recordings will be retained for 10 years. Table 2 shows the alignment of interview questions with the research questions.

**Table 2:** Mapping of interview questions with research questions

Research questions	Interview questions
<p><b>Research question 1:</b> What drivers influence the duration of the service recovery zone of tolerance within a B2B environment?</p>	<p>1. When there is a breakdown of equipment or the system, what factors influence how long you are willing to wait for the problem to be fixed?</p>
<p><b>Research question 2:</b> What are the customer recovery expectations (distributive, interactional and procedural) during the service recovery zone of tolerance within a B2B environment?</p>	<p>2. During this waiting time, do you expect the service provider to compensate you? If so, how should the service provider compensate you? 3. During this waiting time, do you expect the service provider to interact with you? If so, how should the service provider interact with you? 4. During this waiting time, do you expect the service provider to implement special procedures and actions? If so, what kind of procedures and actions do you expect the service provider to implement?</p>
<p><b>Research question 3:</b> What are the most critical customer recovery expectations (distributive, interactional and procedural) during the zone of tolerance within a B2B environment?</p>	<p>5. Which of the service provider actions would you value the most (are the most critical to you) during this waiting time?</p>

<p><b>Research question 4:</b> If customer expectations are met within the zone of tolerance, how will this influence their future behavioural intentions?</p>	<p>6. If you are happy with the way the service provider handled the situation during the waiting time, what do you think the effect on your relationship will be?</p>
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#### 4.7 Data collection

After the initial screening was completed (as described in section 4.5), the willingness of interview candidates to participate in the study was established by means of a telephone call. During the call, the researcher provided information regarding the background and purpose of the research. If the respondent was willing to participate, an interview date was confirmed. Positive participants received written confirmation via e-mail to formalise the interview date and confidentiality aspect. Before commencing data gathering, two pilot interviews were conducted with individuals who have similar characteristics to the study's participants (Saunders et al., 2016). These interviews were conducted in the same way as planned with the actual interviews, with the sample sessions recorded and handwritten notes taken. The aim was to assess the effectiveness of the questions and identify possible challenges that could require the interview guidelines to be improved. The necessary adjustments were made prior to the first official interview, and ethical approval was obtained. Data was collected over a three-week period.

The interviews were conducted at the participants' work environment or any other location of convenience they selected to cause minimal disruption to them and ensure they felt comfortable (Saunders et al., 2016). Consideration was also given that these locations had limited noise levels to support good-quality voice recordings (Saunders & Lewis, 2012).

Before starting the interview, adequate information on the participant was obtained. To ensure participants' confidentiality and that data gathered be used in an ethical way, each participant was required to provide written consent by reading, completing and signing the consent form (see Appendix B) prior to the commencement of the interview. No business or participant names appeared on the consent form as a means of maintaining confidentiality. In instances where informants mentioned the companies where they are employed, these names were replaced with "the company I work for" in the related transcription. With permission from each participant, interviews were recorded with audio-recording equipment to ensure that the discussions are preserved for analysis. Handwritten notes were taken during each interview (Merriam & Tisdell,

2016). The participants were interviewed in line with the research questions in the interview guideline, as per Appendix C. Each question was explained to the participants to ensure they understood the context. The participant responses were explored, and additional explanation was obtained to ensure a clear interpretation of the data (Merriam & Tisdell, 2016; Saunders et al., 2016). This allowed the researcher to gain a deeper understanding of how customers experienced the time zone of tolerance, as well as to determine the drivers of this tolerance period, their service recovery expectations during this time and their behavioural intentions as an outcome of how these expectations were met within the time zone of tolerance. Twelve interviews were conducted until no new codes emerged from the data and saturation was achieved.

#### **4.8 Data analysis**

Literature recommends that data collection and analysis are done concurrently to drive clarity and continuous refinement of data (Bloomberg & Volpe, 2012; Merriam & Tisdell, 2016). The interview recordings were transcribed, and the handwritten notes were transferred into an electronic format. The interview transcripts and related notes were uploaded into the Atlas.ti 8 qualitative data analysis software program (Saunders & Lewis, 2012). As recommended by Bloomberg and Volpe (2012), all the transcriptions of the interviews were read to obtain a sense of the “major and minor stories” within the data (p. 194). Themes were identified by means of the number of repetitions of certain words. Coding of data was done to organise sections of text into key themes (Creswell & Poth, 2018; Lindgreen et al., 2006). The data was analysed according to the themes (Given, 2008).

#### **4.9 Data rigour and trustworthiness**

For qualitative research to be rigorous, it has to be transparent, credible, dependable, comparative and reflexive (Given, 2008). Whilst qualitative research may be characterised by methodological differences, demonstrating rigour and trustworthiness is critical (Saunders et al., 2016). A rigorous approach will ensure validity of the data gathering process and analysis.

To increase the external validity of the sample, business customers from various industries were selected (Kaski, Niemi, & Pullins, 2018). Good preparation prior to each interview aimed to contribute towards control of researcher error and to support the trustworthiness of the data gathered. A thorough description of interview interpretations

and perceptions contributed to data rigour (Merriam & Tisdell, 2016). Therefore, sufficient time was scheduled with each interview to ensure participants had a clear understanding of the questions and the interviewer was able to verify the meaning of the feedback (Saunders et al., 2016). Upon preparing for the interviews, the interviewer took dress code into consideration to align with the setting where the interview was conducted. This encouraged participants to form a positive perception of the interviewer and limit potential bias they could have developed due to the appearance of the interviewer, which in turn could impact reliability of the data gathered. To ensure trustworthiness of the data derived from interviews, the researcher was cognisant of possible interviewer and response bias, and declared it accordingly (Saunders & Lewis, 2012). To limit the probability of interviewer bias, the researcher conducted all the interviews (Lindgreen et al., 2006). In a further attempt to limit interviewer bias, the interviewer limited tonal variations and non-verbal behaviour when participants responded to questions (Saunders & Lewis, 2012).

The interviews were mostly conducted in a private area, such as an office, to retain the participants' confidentiality, consequently limiting bias. To further eliminate participant bias and ensure testing validity, the researcher's employer was not disclosed to prevent informants from changing their responses as they could expect future consequences because of the interview. The inclusion of all informants' interviews and opinions supported reliability and trustworthiness of the data (Saunders et al., 2016).

Researcher bias was limited by the accurate transcription of interviews and following a systematic approach towards analysis of the data. Analysis results have been triangulated within the literature review to verify the meaning of the most dominant constructs and themes that surfaced from the data analysis.

#### **4.10 Research limitations**

Due to the complexity of the topic and the industrial B2B domain explored, this exact study cannot be replicated. Participants were expected to share their perceptions of service failure and had to retroactively distinguish between failure and recovery effects. The accuracy of participants' memory could have been impacted, leading to some information not being shared due to weakened memory related to service failure and recovery incidents.

Additional limitations within this study included:



- The nature of a qualitative study does not allow for statistical generalisations to be made due to the limited sample size of customers within the Gauteng and KwaZulu-Natal regions (Saunders & Lewis, 2012). As such, geographical bias can influence the results derived from this study.
- Customer service recovery expectations within the industrial B2B environment may not be replicated in other B2B or B2C domains, where the nature of failures and relationship types might influence customer compensation expectations and behavioural intentions in a different way. Therefore, generalisability is limited to industrial B2B environments.
- Interviewer bias might influence data quality if the manner and tone in which the interviewer directs questions towards the participants convey personal opinions and beliefs (Saunders et al., 2016).
- The participants' nature can cause participation bias to influence data quality (Saunders et al., 2016). If the respondent had limited time to participate, it might have caused the individual to omit some data during the interview.

## **CHAPTER 5: RESULTS**

### **5.1 Introduction**

This chapter presents the results that are structured in line with the research questions stipulated in Chapter 3. The data was collected through face-to-face, semi-structured interviews. The consistency matrix in Chapter 4 served as guidance to ensure alignment amongst the research questions, interview questions, literature reviewed and data analysis. The results are structured in accordance with themes that emerged from the qualitative analysis of the interviews. Insights on the key drivers of the time zone of tolerance, the main recovery expectations of customers during the time zone of tolerance, and how the way the firm manages this time zone of tolerance impacts customer behavioural intentions are presented in the following sections.

The next part of this chapter describes the context and background of the participants who were interviewed. This is followed by a presentation of the results from the qualitative analysis.

### **5.2 Description of the sample**

To obtain a heterogenous sample that would contribute to the depth and richness of data gathered, individuals representing a wide scope of industries within the commercial and manufacturing environments who experienced frequent service failures of industrial equipment were selected by means of a purposeful sampling approach. Table 3 confirms the heterogeneity of the sample and presents a list of the participants, which contains supporting information on the industry each respondent is employed in, a description of their work functions, and their geographical location. The individuals' experience levels ranged from 12 to 35 years. Therefore, each participant had a broad knowledge of working with industrial equipment and related service failures within either a commercial building or a manufacturing plant. The entire sample consisted of 12 males qualified in the engineering field, who held roles that dealt with specialist machinery, or in general facility management roles that required a technical understanding of a broad range of industrial machinery within buildings. The confidentiality of the participants and the companies they work for was maintained by referring to only the participant number in the analysis and discussion.

The participants were based in either Gauteng or KwaZulu-Natal. Eleven interviews were conducted at the offices of the companies the participants are employed at, and one interview was conducted at a venue off-site from the individual's company premises. Each participant was sent a written briefing of the research topic and the focus of the study to give them better insight into what the interview aimed to achieve and to create the opportunity to clarify any concerns or uncertainty prior to the interview.

**Table 3:** Information of participants and details of the context

Participant number	Function of participant	Industry	Description of role	Area
1	Manager: building technology and mechanical and electrical	Television: recording and broadcasting	Manages the mechanical and electrical maintenance and repairs of all systems and machinery within a facility. More than 1 000 people work in this building.	Auckland Park, Gauteng
2	Contracts manager facilities department	Pharmaceutical	Manages the office building and production facilities that contain critical cooling facilities.	Midrand, Gauteng
3	Facility manager	Fast-moving consumer goods	Manages the head office facilities of a global company (commercial building).	Sandton, Gauteng
4	Plant manager	Chemicals and explosives Manufacturing	Manages production plant operations, including the maintenance and upgrade of specialised industrial equipment.	Modderfontein, Gauteng
5	Regional operations manager	Information and communication technology	Manages the head office facilities of a global company (commercial building).	Woodmead, Gauteng
6	Engineering manager and maintenance planner	Food and beverage Manufacturing	Manages the installation and maintenance of all production equipment. Manages the scheduling of maintenance of production equipment of a large bread baking plant responsible for producing 300 000 loaves per day. 24/7 operations.	Shakaskraal, KwaZulu-Natal
7	Owner and project manager	Engineering and construction	Installation and maintenance of large air-conditioning projects, including building management systems for commercial buildings, governmental buildings (for instance, universities and hospitals) and production plants. Employs 57 full-time and 40 contract workers.	Pinetown, KwaZulu-Natal
8	Consulting engineer	Engineering design and construction	Provides consulting engineering services (specification and design) and manages air-conditioning installation projects.	Durban, KwaZulu-Natal

9	Executive manager: facilities	Military defence and civil security technology	Manages all the offices and production facilities where high-tech equipment is manufactured.	Centurion, Gauteng
10	Refrigeration manager	Food and beverage	Responsible for the 24/7 operations of cold-storage facilities of an abattoir.	Kempton Park, Gauteng
11	Maintenance foreman	Consumer goods Manufacturing	Responsible for the maintenance and operations of production machinery used for the manufacturing of non-breakable plastic containers.	Brakpan, Gauteng
12	Operations manager	Banking	Responsible for the operations and maintenance of a 32-storey commercial building of a large financial institution with more than 2 000 workers.	Pretoria, Gauteng

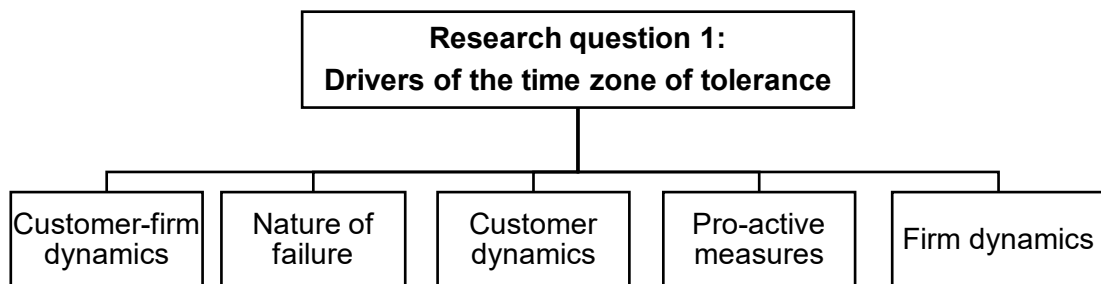
### 5.3 Results: Research question 1

*Research question 1: What drivers influence the duration of the service recovery time zone of tolerance within a B2B environment?*

Customers in a B2B environment acknowledged that after a service failure occurred, the time zone of tolerance did exist whilst they waited for the problem to be fixed. The main aim of this research question was to determine the drivers that are instrumental during the time zone of tolerance and that influence how long customers are willing to wait before their behavioural intentions become negative.

#### 5.3.1 Drivers of the time zone of tolerance

Five main drivers – namely customer-firm dynamics, nature of failure, customer dynamics, pro-active measures, and firm dynamics – emerged from the interview data, and are depicted in Figure 4. Table 4 provides an overview of the number of participants who mentioned aspects related to the particular driver of the time zone of tolerance ultimately identified. Furthermore, the results are presented, focusing on each of the drivers identified by the participants.



**Figure 4:** The main drivers of the time zone of tolerance

**Table 4:** Overview of the results of the main drivers for research question 1

Rank	Driver	Frequency
1	Customer-firm dynamics	11
2	Nature of failure	10
3	Customer dynamics	10
4	Pro-active measures	8
5	Firm dynamics	7

### **5.3.1.1 Customer-firm dynamics**

Customer-firm dynamics relate to the relational and psychological exchanges between the customer and the firm. All participants contributed towards identifying the interrelated drivers that connect them to the firm and influence the time zone of tolerance. Six sub-themes were identified from the interview data, including vendor selection, contractual obligations, customer-firm relationship, lock-in effect, customers' inertia to change suppliers, and quality of past performance. The results related to the sub-drivers are subsequently presented.

#### Vendor selection

Participants 1, 2, 6, 7 and 9 considered using the right vendors as an aspect that influenced the time zone of tolerance. Both participants 1 and 6 insisted on dealing with original equipment manufacturers (OEMs) directly to minimise any delays in the delivery of spare parts. Participants 2 and 7 confirmed that they were prepared to pay a premium and "rather go for the little bit higher, well-known companies than the cheaper service provider", to ensure better quality and fewer failures; and when they do have a failure, they are compensated. Participant 9 found the reliability of equipment more important than the level of service, motivating this by stating, "If you have some service issues, it's minor, but equipment-wise, that's definite."

#### Contractual obligation

Of all the sub-themes related to customer-firm dynamics, contractual obligation was the sub-driver most mentioned by the participants. In the case of preventive maintenance, SLAs are usually in place and specify the required response and recovery times. By default, the key performance indicators in these contracts related to response and recovery time set the time zone of tolerance. Participant 2 detailed how his company's SLAs are structured to manage response time in relation to failure severity: "We have got three simple categories in our SLAs. The first category is 'Not Urgent'. The definition says it is next business day. 'Urgent' is when the call was made before 12, then response is required within same business day. If the call was made after 12, it's next business day. 'Business Critical' varies usually between two and four hours." Participant 3 commented on the complexity of service recovery within a B2B context, and explained that, "Not everything in a contract is black and white, and you need to be able to be fair and rational in terms of determining what the steps would be." So even when the time

zone of tolerance is formalised in a contract, the customer might select to extend this time zone of tolerance. When there is an SLA, a general higher level of service recovery is expected, as per the example below. Participant 9 explained, “When we eventually sign a service level agreement that [service level] will change. When we have a breakdown, they make sure they get guys out as before they had not. Now when they collect their machine for a service or a repair, we actually get a loan unit.”

### Customer-firm relationship

Most participants confirmed the customer-firm relationship to be a driver of the time zone of tolerance. A high level of service delivery, including the elements of honesty and trust, were considered important requirements of a strong customer-firm relationship. It was acknowledged that when there is a strong relationship, the zone of tolerance will extend beyond the formalised response time in an SLA. Participant 2 stated that, “The long-term test, in general, is what their service delivery looks like. Is it an open, honest relationship when service delivery is of good quality and high standards, then it’s typically the type of relationship you want to keep.” Participant 5 added, “The key thing is that relationship that you can trust, so when you do get such a situation, they also know, and will offer this [backup equipment] already without you saying.” Furthermore, participant 7 considered loyalty to form part of the customer-firm relationship: “With one specific supplier, we’ve had a very long-term relationship with them, which is in surplus of 30 years. We’ve stayed loyal with them, because they’ve been here through thick and thin.” Participant 11 concluded with, “bring an element of maintaining the relationship into that [service recovery].”

### Lock-in situation

Three participants identified lock-in situations as influencing the time zone of tolerance. With specialised and brand-specific equipment installed in the industrial environment, customers often rely on specific firms to provide service support and they have to be tolerant with these companies during service recovery. Participant 2 stated, “In some cases, we have got very specialised fields and do not always have a choice of choosing the supplier – for instance, the access control in the building is one supplier.” This limits the extent to which a client can impose penalties if a supplier. Participant 4 gave an example of the dilemma: “If I can think of one particular company that we deal with in Belgium. They are the only guys that supply this kind of machine, so if we start imposing penalties, and the guys cut ties and say we are not going to deal with you any more, we



are stuck as a customer, for how are we going to get spares and support for this machine. Switching cost is a potential issue.”

#### Quality of past performance

A few participants mentioned the quality of past performance with a firm to be a driver of the time zone of tolerance. Participant 8 stated, “Past experience with this contractor and past experience with other contractors determine what I think of how they will meet my expectations.” Participant 11 confirmed that repeat failures – “irrespective of what the priority is” – also played a role and added, “if it has happened three or four times, then I will say, well, it’s too much.” Based on the data, it appears that relationships will only protect the time zone of tolerance up to a point. When failures occur repeatedly, a customer can become less tolerant with the firm.

#### **5.3.1.2 Nature of failure**

The complexity of the failure, the severity of the failure and the frequency of failures were identified as drivers of the time zone of tolerance. Customers are cognisant of the fact that complex failures can take longer to repair as additional processes might be required for the failure to be restored. The severity of a failure could impact how long a customer is prepared to wait, and the frequency of failures also proved to be a driver of the time zone of tolerance.

#### Failure complexity

Participant 1 identified failure complexity as a driver that impacts the time zone of tolerance: “You’ve got to go and get quotes from three different places. So sometimes you have to send it to at least one person to get them to strip it and then quote on it.” A failure that is complex to get repaired causes a delay in the recovery time. Consequently, the customer grants an extended time zone of tolerance to the firm during the service recovery process.

#### Failure severity

All participants confirmed that the severity of a failure influences the time zone of tolerance. This aspect of failure dominated the interview data. Some types of services

are more critical than others, leading to a varying impact on the severity of the failure.

Participant 3: “If it’s a comfort cooling or something to that effect, then you can work around that and you could introduce other solutions to get to an acceptable position for a short duration, and that would be acceptable. But it’s critical where it is an interruption of the system.”

The area in which a service failure occurs can be related to the severity of the failure and the duration of the time zone of tolerance.

Participant 8: “My expectation is driven by how severe the impact of the area affected by the failure. If I have got a hospital and one ward is down, it’s all right – I can make a plan. But if I’ve got an ICU ward that’s down, then it’s not all right.”

Where there was limited backup equipment in a critical system, the severity of a failure was amplified, and the zone of tolerance became narrower due to the increased urgency of situation.

Participant 6: “Depending on the breakdown that occurs, like you said when it’s critical equipment we do have a standby unit that we can switch to, but when the breakdown occurs, the criticality becomes much more urgent because you’re on standby capacity.”

### Failure frequency

Participant 7 identified failure frequency as a third aspect related to types of failures that may impact the time zone of tolerance: “If it were to be multiple failures, now we’re getting to the point where I’m looking for compensation. If it’s a once-off here or there, then it’s a team effort, we work together, and we resolve the problem. But if there’s a multitude of failures and on an ongoing basis, well then we’ll be definitely expecting them to compensate us for what we do.”

### **5.3.1.3 Customer dynamics**

Customer dynamics of - internal processes within the customer organization, customer inertia to change suppliers, effects within the network of the customer, and the reputation of the customer – were identified as drivers of the time zone of tolerance. Half of the

participants noted that certain internal procedural constraints, network effects by means of pressure from management and customers, the unwillingness to change suppliers, as well as the impact a failure could have on their reputation influenced the time zone of tolerance.

### Customer internal processes

Participants 1, 4, 5 and 12 highlighted that the internal processes within the companies they work for can cause delays in service recovery, leading to an increased time zone of tolerance towards the firm. Participant 1's response when asked which drivers impacted the time zone of tolerance, portrayed his frustration with the internal bureaucratic processes – "By outsourcing a lot of our work, we're working on a system where we have to get three quotations, which is not really working for us because that just takes too long." Participant 4 added, "We are quite a difficult organisation to deal with. I know that. Suppliers often moan. So, it's not all from the supplier's side, it's also what we as an organisation are doing to assist." Supporting this, Participant 12 stated, "Red tape exists as well. We have a very vast complicated procurement process. That is, according to me, the biggest riddle in attempting to do either normal repairs, planned repairs, urgent repairs or even emergency repairs. So, to get emergency repairs done, people will say in theory you can repair it, there's no problem, just do it. But it's not as easy as that."

### Inertia to change suppliers

Some of the participants confirmed that inertia is one of the drivers of the time zone of tolerance. Participant 4 stated that, "You always take a risk by moving to somebody new. You could always end up with the same problem, and almost be forced to go back to the previous supplier. We often say, Better the devil you know than the devil you don't" Participant 9 added, "Look, for any equipment that we currently use, we can find a substitute. But the thing is, finding a substitute to gain a service record, that's not going to be the easy part. The thing is, can you trust it?" The results showed that customers are more tolerant towards a firm from which they do not want to move.

### Network situation

Fifty per cent of the participants mentioned the pressure they face when a service failure occurs, as they are expected to keep up- and downstream stakeholders informed of the service recovery progress. The higher the pressure from their superiors and network of

internal or external customers, the narrower the time zone of tolerance. Participant 11 explained, “I need to report back to the business, to the people that are affected. If they are not going to be able to repair that chiller plant within the expected time, they need to tell me so then I can inform the organisation and say unfortunately we’ve run into issues.” Participant 4 added, “If I know upfront we’re going to be delayed by an additional week, I can then start communicating with other colleagues, suppliers and customers to inform them of the situation. But if you don’t know, that’s often when the ugliness starts to happen.” Participant 10 emphasised the importance of keeping his superiors informed: “I would like feedback on a regular basis. That’s very important to us, especially with the pressure that we’re getting from head office.” Participant 12 concluded with the commercial side of the network effect, stating, “I need to report to the big man, the big people in the institution and I need to know what’s going on, because at the end of the day it’s all about money and for the other clients in this institution being able to do their work.”

#### Reputational impact

Participants 3, 8 and 12 identified reputational impact as a third aspect on the customer side that can impact the time zone of tolerance. Participant 8 explained that reputational damages can affect consumers financially and stated that “customers can get lawsuits against them, so it could be the damages to a client, but it can also be reputational damages to a client. The client’s financial and reputational damages.” Some institutions are very conscious of their reputation and public image, and do not tolerate ineffective service recovery processes if their name is at risk. Participant 12 said, “The institution I work for is very, very alert on image. The image of this place is core, it counts 90%. So that sometimes assists me in getting things done, because you don’t want to see on TV something about an instance nothing’s been done about it and things like that.” Therefore, it is evident that the impact a service failure has on a customer’s reputation can influence the time zone of tolerance.

#### **5.3.1.4 Pro-active measures**

Majority of the participants identified pro-active measures as a driver that can limit unplanned failures. Three dominant sub-drivers that emerged from the data include preventive maintenance, system redundancy, and spare parts availability.

### Preventive maintenance

Several participants confirmed that preventive maintenance reduced the occurrence of unplanned downtime of critical equipment. Participant 3 stated: “If you have a system that has redundancy built into it, where you’ve got, say, two chillers, or you’ve got three chillers running. Two run and one is on standby, you have to have the correct preventive maintenance regimes in place to ensure that two chillers are running at any given time.” Furthermore, participant 12 added the importance of this aspect in relation to the time zone of tolerance: “We prefer to do preventive maintenance and plan corrective maintenance. We even spot check and inspect the equipment to see if it was checked and serviced. If they [the firm] didn’t look after it the way we expected them, we then have a very short tolerance with them.”

### System redundancy

System redundancy is an engineering term used when a backup system is in place and starts working if the main system breaks down. Participant 5 explained the time zone of tolerance as being directly dependent on the level of redundancy built into a system – “It depends on the redundancy in the system, then your waiting period would be as soon as practical” – and gave a good example, “In a UPS room you’ve got two air-conditioning systems. One can cope with the heat load and the other one there is a standby. In that case, it’s what you call a ‘n plus one’. So, when you have a redundant system, it’s got 100% capacity to continue working if one system fails.” Moreover, participant 3 said, “One of the key factors would be the redundancy that’s built into the system. If you have a system that’s only got one device supporting it, then you cannot expect it to be operational at all times. Your expectations there would be well, if it fails, the best we can do is to fix it within a certain time frame.”

### Availability of spare parts

Two participants confirmed that the availability of spare parts influences the time zone of tolerance within both manufacturing and commercial environments. The easier it is to obtain the spare parts, the faster service recovery can be done. Participant 10 emphasised the importance of this aspect in his cold-storage manufacturing environment – “That’s usually the biggest thing. Usually we have equipment that’s imported from overseas and a lot of times the actual local suppliers don’t keep stock of those spares maybe and then you sit with that problem.” Participant 12 confirmed that the availability

of spare parts is just as important in the operation of a commercial building – “It can be that a big UPS generator went into a fault and they cannot get it repaired in that time, but it’s not their fault as well because there are no spares in South Africa, or it needs to come from Cape Town or it needs to be manufactured, depending on what broke down.”

### **5.3.1.5 Firm dynamics**

Seven participants of this study stated that competency, capabilities and brand reputation of the firm influenced their tolerance during the service recovery process.

#### Competency and capabilities of the firm

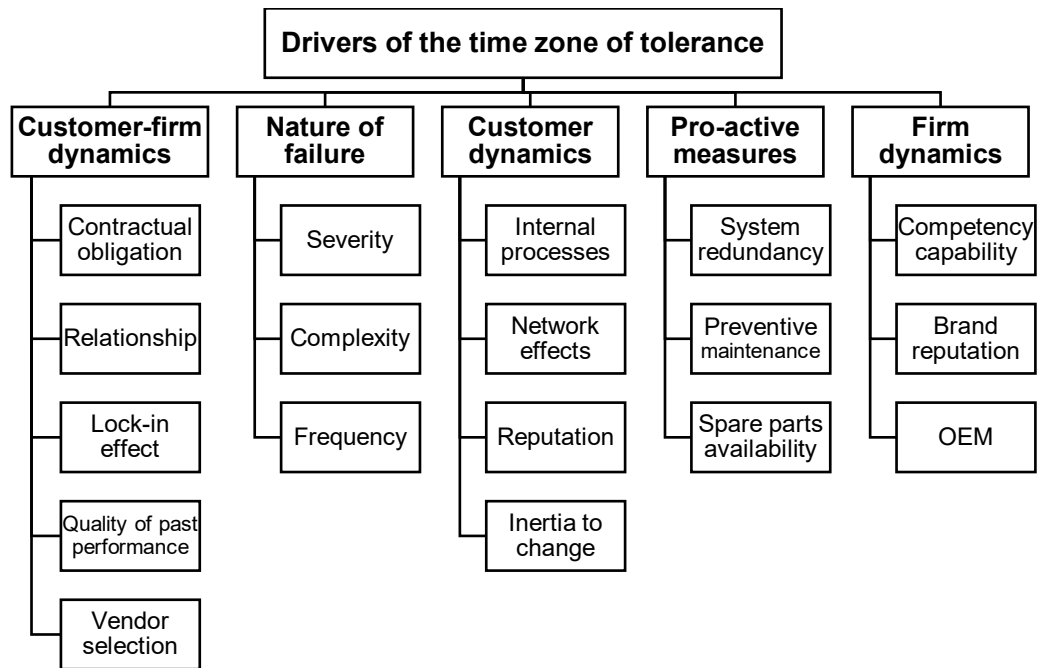
The company’s competency to manage the zone of tolerance was named an important aspect of firm-related drivers. Participant 7 made it clear that competency started with answering the phone on time, and that he does not tolerate incompetence. While participant 11 expected the firm to be technically competent and quick in fault finding to get to the root cause of the issue “within the first 30 minutes of the problem occurring and of them getting to the site.” In cases where the customers were not locked in with certain suppliers, they sourced alternative providers deemed capable of furnishing services. As participant 12 explained, “We know there are five or six service providers. They have the same capacity and capability to help with, for example, a water pipe that burst or something like that.”

#### Brand reputation of the firm

A few of the participants considered the firm’s brand reputation as affecting the time zone of tolerance. Two main reasons for this emerged from the data. The first reason was the belief that original parts can be obtained quicker, resulting in faster service recovery. Participant 1 motivated this by stating, “If you’re using the brand supplier to do the repair, it’s always much better that way, because it’s much quicker to get the spares than for an outside company to get those spares or parts.” The second reason was that participants believed a strong brand guaranteed a good quality product. Participant 6 explained, “Because company XYZ is the OEM for this piece of equipment and as a business we know we want efficient reliable performing equipment, we will persist to work with the OEM.”

### 5.3.2 Summary of the findings of research question 1

In answering research question one, five main themes were determined as the drivers of the time zone of tolerance – customer-firm dynamics, nature of failure, customer dynamics, pro-active measures, and firm dynamics. Within these main themes, 18 sub-themes emerged, as summarised in Figure 5.



**Figure 5:** Graphical summary of the drivers of the time zone of tolerance

Although these drivers are displayed separately in Figure 5, it became clear during analysis that due to their interrelated nature, these drivers should not be viewed in isolation. Two sub-drivers dominate and were acknowledged by most participants. The highest-ranked driver is contractual obligation, with severity of failure ranked second. Network effects, capability and competency of the firm and redundancy in the system were highlighted by half of the participants.

### 5.4 Results: Research question 2

*Research question 2: What are the customer recovery expectations (distributive, interactional and procedural) during the service recovery time zone of tolerance within a B2B environment?*

The main focus of this research question was to determine the recovery expectations of B2B customers from an equity and justice theory perspective. Therefore, the data was analysed within the dimensions of distributive justice, interactional justice and procedural justice. It was evident that consumers accepted that service recovery can take time. Interactional and procedural recovery expectations received preference within the time zone of tolerance, whilst distributive measures became more prominent when the time zone of tolerance had been exceeded.

**Table 5:** Overview of the results of customer recovery expectations within the justice dimensions

Rank	Justice dimension	Mechanism	Frequency
1	Interactional justice	Communication	12
2	Interactional justice	Psychological	12
3	Procedural justice	Recovery time	12
4	Procedural justice	Response time	12
5	Procedural justice	Root cause analysis	8
6	Procedural justice	Just fix it	5
7	Distributive justice	Free spares and equipment	5
8	Distributive justice	Free labour	3
9	Distributive justice	Free training	1
10	Distributive justice	Free travel	1

#### ***5.4.1 Recovery expectations within the distributive justice dimension***

Customers confirmed their acceptance that service recovery might not be completed during the time zone of tolerance. However, in cases where equipment or services were still under warranty, clients expressed their monetary expectations to be dependent on the warranty status of the equipment that had failed and, in some cases, contractual penalties that could be imposed on the firm. In all of the interviews conducted, no participant had high compensation expectations during the time zone of tolerance.

##### ***5.4.1.1 Free spares and spare equipment***

Only in cases where equipment was still under warranty or where the wrong equipment was installed did customers expect the free replacement of the spares and equipment. In one example, a firm replaced parts even after the warranty period had expired to



maintain the long-standing relationship with the client. Where the design and installation of new equipment in a manufacturing plant was incorrect, participant 4 expected the service provider to rectify its mistake and to “fix the problem by ordering the right pipes from this place, and the right compressor from that place”. Where participant 11 had a strong relationship with a specific firm, he mentioned how far the company will go to maintain the relationship – “If need be, they will repair it, and if it’s just out of the state of warranty period, they will still bend over backwards to try and repair it or supply me with a new component without any extra cost to my client.” From this feedback, it was observed that compensation in this form did not operate in isolation, and that the extent to which the firm took responsibility for a failure as well as the depth of the customer-firm relationship influenced the level of equity restored after a service recovery.

#### **5.4.1.2 Free labour**

Participant 1 mentioned the value of receiving free labour when heavy equipment needs to be repaired and a component first needs to be opened to determine the fault: “Compensation could be in the form of stripping a piece of machinery without charging for the time to do it.”

#### **5.4.1.3 Free training**

In the experience of one participant, some firms provide free training as to avoid contractual penalties being imposed.

Participant 4: “Although penalties are written into contracts, I’ve never actually seen it being carried out. What we have seen in the past is the guys will either provide service training, they might provide spares, or try and make up for it in a different way rather than with penalties. Training is one that I’ve often seen were they’ll provide training for ten people as a resource for free.”

#### **5.4.1.4 Free travel**

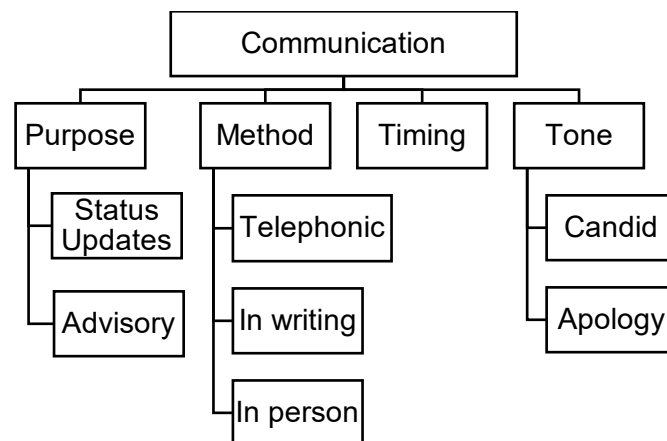
Firms usually expect the customer to pay for travel costs. However, in cases where repeat failures occur, participant 9 stated that, “If it is rework on the same problem, no travelling costs must be charged...”

## 5.4.2 Recovery expectations within the interactional justice dimension

Service recovery actions within the interactional justice dimension refer to the way a firm behaves towards a customer and how fair this consumer feels treated (Brock et al., 2013). All of the participants confirmed communication in various forms and frequencies to be a requirement. The level of relationship between the customer and firm surfaced as the second dominant aspect that influenced perceived equity within this dimension.

### 5.4.2.1 Communication

All of the participants were clear on the importance of communication within the time zone of tolerance. Communication does not happen in isolation and concurs with both distributional and procedural recovery aspects. As participant 5 explained, “In our world, in this service industry where we impact people and business directly, I can’t think of anything that’s not important. But the key thing is communication, because at least you know what you can do as well.” Participant 9 expressed his expectations when he stated, “Oh, I love feedback, hey. Feedback, feedback, feedback.” The specific factors that participants discussed within communication are illustrated in Figure 6.



**Figure 6:** Overview of expectations related to communication

All of the participants emphasised that the main purpose of communication is to be informed of what is going on with the service recovery process, as they have a responsibility to keep stakeholders within their environments updated on the progress. Severity of the failure also required a high level of communication.

Participant 11: “Especially if it’s a problem area that has a high impact through business, I need constant communication. I mean, we live in an age where everyone has smartphones. I used to be updated on the expected time of repair. I need to be updated if an expected time is not going to be met, because for me it’s important, because I need to report back to the business to the people that are affected. So, it’s very important the service provider keeps in constant contact with me and let me know.”

In cases where failures were categorised by severity, the individuals were more specific on the frequency and method of communication they expected.

Participant 8: “If it’s a critical failure, we would expect somebody to phone us back within two hours to say they’ve got a guy on-site and this is what he can see. Then, thereafter every four hours from the first day, at least twice a day. Thereafter daily, thereafter weekly.”

Providing guidance was an additional requirement to serve an advisory role in the decision making of mitigating actions, whilst service recovery was in progress.

Participant 4: “If I don’t know and now you’re causing me to have to suddenly plan under emergency and have to go and explain to somebody else what’s going on, but I don’t have the information to be able to explain it, it puts me in a difficult position. As long as I have proper information to work with, then we can always make decisions.”

Some participants were specific on the way they expected communication to happen during the time zone of tolerance, although their preferences differed.

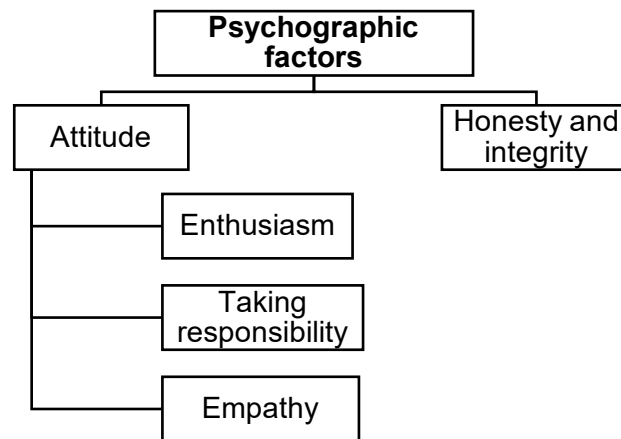
Participant 2: “They need to send us updated photo reports and progress ‘milestones’ if I can call it that.”

Participant 7: “Communication must be verbal via telephone to keep me in the loop, and then I would expect an e-mail once a day. If it is repairs that extend beyond a week, then I would expect a written report as well.”

Participant 10: “So a form of communication could be an e-mail; if it’s really, really urgent then call me.”

### 5.4.2.2 Psychographic factors

Some participants discussed a few psychographic aspects that contributed towards restoring equity within the customer-firm exchange situation. One of these main factors was the firm's attitude and how the customers wanted to be treated during the time zone of tolerance. Enthusiasm, taking responsibility and displaying empathy were mentioned by a few participants. The other required factors stated as imperative during the time zone of tolerance were honesty and integrity, which strengthened trust within the customer-firm exchange relationship. Figure 7 provides a graphical summary of these factors.



**Figure 6:** Overview of expectations related to psychographic factors

Two participants commented on their expectations of a firm to react to a service failure with enthusiasm, and Participant 3 explained, "The response I get from that [service failure] would be a solution back-up within 10 minutes and probably somebody on site 20 minutes after that. That's the kind of enthusiasm that you want from your vendor and to be part of the solution and not part of the problem." Participant 8 commented on the frustration felt when a firm does not display this enthusiasm towards the customer and gives an attitude of "the guy is not available so live with it. It's not an attitude to please", further stating that such a poor attitude is the root cause of customer dissatisfaction.

Four participants emphasised how important it is for the firm to take responsibility for a problem, especially if it's coming from their side. Participant 5 commented that, "It must never be a blaming game. Blame takes a lot of energy and you've got to think of a lot of

things why you're not at fault. I'd rather think of what can be done."

Two participants explained that they needed firm to display empathy towards them as customers. Participant 4 said he expected the firm to put itself in his position and understand why he is under pressure and "shouting this thing needs to get done." Participant 6 confirmed his frustration of not feeling heard and experiencing a lack of empathy from a firm, because "even if we talk to the service manager, no disrespect to him; I don't think he knows our business".

All of the participants confirmed the importance of honesty. Communication is closely related to this aspect, as all participants said that candid, honest communication from a firm extends their tolerance during the service recovery period. Honesty had a positive influence on customer behavioural intentions. Participant 9 described a situation where an electric motor had been melted by a supplier and the honest communication he received from this firm as well as the way they compensated him for the service failure increased his loyalty towards them, despite the fact that they had caused an extended failure period. Participant 11 advised that he just needed honesty from a service provider, even though it might be bad news, but that news might be empowering him, resulting in the firm also building trust with him. Participant 5 explained the value of honesty and building trust in the customer-firm relationship: "If you've got a strong relationship, trusting relationship, that would grant that company a bit more grace. You will be more forgiving."

### ***5.4.3 Recovery expectations within the procedural justice dimension***

The procedural recovery actions that emerged within the data were response time, getting the problem fixed, finding the root cause of the failure, and the recovery time.

#### ***5.4.3.1 Response time***

Response time is how long it takes for the firm to respond to a complaint, and this was a prominent recovery expectation of all participants. Although participant 5 acknowledged that geographical location plays a role in response time, participant 3 made it clear that he wanted to see the failure "being treated with urgency". Participant 12 added that, "We need them to respond immediately to our call, because it could be something that's easily solvable, or it could be a beginning of a disaster." Furthermore, he confirmed that he

expected firms to honour the response times, as agreed in the SLA. Participant 9 associated response time with the resources a firm has, and explained, “If they don’t have sufficient resources, they can’t respond”.

#### **5.4.3.2 Just fix it**

Multiple participants had varying contributions about their expectations on getting a problem fixed. Participant 6 emphasised the urgency of getting the problem resolved, stating, “We want it fixed and get back to our normal running”. This was supported by participant 7, who said life “revolved around action and getting things done”. Two participants expressed how they expect the firms to go the extra mile – according to participant 9, this is not something he experienced often, as “a few companies go the extra mile. They fix the problem, they carry on.” Participant 1 had been more fortunate and relayed a positive example where a firm “really went out of their way and came out two o’clock the morning. It was not a problem to them.”

Some participants confirmed that flexibility in procedures supported their recovery expectations during the zone of tolerance. Participant 11 affirmed the value of firms being flexible in their service recovery procedures: “It takes three days to get an order approved, but my machine is down. What do I do? Guys will bring their stuff on a delivery note and they wait for me till I send the order, then they will give me an invoice. It helps a lot.”

The level of power the customer has, and relationship also influence the extent to which the firm is willing to be flexible.

Participant 2: “Firstly, it comes down to the amount of business you do with them. The contractual monthly values. If you cut your budget too lean, then obviously the service provider is not interested in paying to work for you. They will easily turn around and say they first want payment before they come out. If you regularly do business with them and there’s quite a good monthly cash flow the response usually is good – they will bend over backwards to accommodate you.”

#### **5.4.3.3 Root cause analysis**

Eight participants confirmed that finding the root cause of failures was required to

manage their recovery expectations during the time zone of tolerance. Participant 2 stated that conducting a root cause analysis was important to “see what were the inefficiencies and the failures that came out of that analysis and do not repeat it in future”. Participant 11 confirmed the value of root cause analysis in managing his network, because it enabled him “to communicate to the organisation and to my [his] boss, and say this is what happened and they ran into this kind of trouble and we have discussed it how we can mitigate it in the future.” Participant 11 associated the ability to do a root cause analysis within a short time with the firm’s competency. Both participants 1 and 12 related the necessity of a root cause analysis with the severity of the failure. Participant 1 mentioned, “If something severe would happen, we do a root cause analysis where we see, okay, this happened, let’s make sure that if it happens again we are prepared”. Participant 1 aligned with this approach by explaining what they expect from a firm if a major failure occurred: “If it’s a major item, what you would expect them to do is a full investigation so that a situation like that should never arise again.”

#### **5.4.3.4 Recovery time**

All participants highlighted managing recovery time as an important recovery expectation during the time zone of tolerance. Information on the duration of recovery time helps the customer plan. Therefore, communication is always required

Participant 1: “When we have a power failure, we run on UPS. So the first thing we want to know is how long?”

The severity of the failure was also found to determine the tolerance the customer has towards the recovery time.

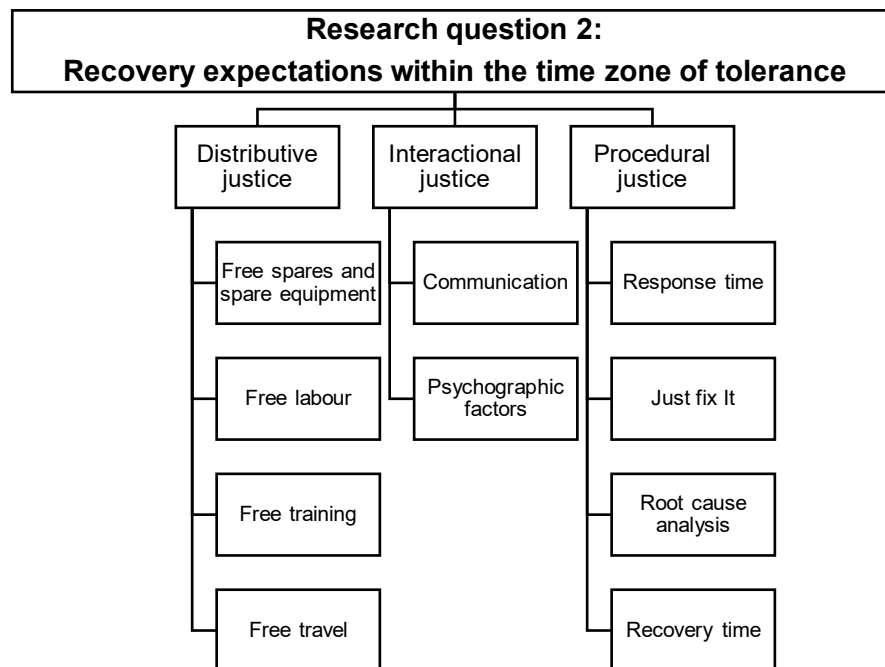
Participant 2: “Yes, if it’s business critical, obviously you want it to be resolved within hours.”

When a failure is not critical, and the customer receives regular status updates, the zone of tolerance remains.

Participant 4: “If the communication is there and you understand where it’s going, what the impact is going to be, then one can make a call. In that instance, we could afford to wait the six months.”

#### 5.4.4 Summary of the findings of research question 2

The aim of research question 2 was to determine the recovery expectations of customers during the time zone of tolerance. A summary of these recovery mechanisms is illustrated in figure 8. Within the distributive justice dimension, customers expected free spares, labour, parts, travel or training. Within the interactional justice dimension, communication accompanied by psychographic aspects such as of honesty and trust is required. The procedural mechanisms of response time, recovery time, quick repair and conducting root cause analysis were identified as the main recovery actions within the procedural justice arena.



**Figure 7:** Overview of results for research question 2

As presented in table 5, all the participants gave preference to interactional and procedural justice mechanisms. These mechanisms do not function in isolation, and it was determined that customers expect timely communication in parallel with speedy response and recovery time, depending on the situation.

The recovery expectations during the time zone of tolerance, as described by participant 2, portrayed the complexities and interrelated nature of all the justice dimensions: "Something I haven't mentioned, usually in the SLA there are two things: the response time to get to site (the most important thing); and then the recovery time. In business-



critical failure, recovery time is expected the same day or an agreed action plan. If it's urgent, it might be the next day recovery or per action plan, or if it's not urgent... you never know when an action plan needs to kick in, because it might be something that you can't fix right now and you have to wait for a time period for cargo to be flown in or whatever, so that's when the plan of action will kick in." The most critical recovery expectations are discussed in the following section.

## **5.5 Results: Research question 3**

*Research question 3: What are the most critical customer recovery expectations (distributive, interactional and procedural) during the time zone of tolerance within a B2B environment?*

### **5.5.1 The most critical recovery actions during the time zone of tolerance**

Communication and time (both response time and recovery time) were identified as the most important recovery mechanisms expected by customers. Some participants ranked communication to be equally as important as recovery time.

*Participant 10: "You see, in our situation and the environment we are in, timeline and communication, it's very important for us. It's the two main things in our environment."*

In one case, a participant noted that besides communication, understanding the scope is important, as often the customer and firm might have a misunderstanding on the exact scope of service recovery, which leads to the failure not being dealt with in the way the client expected. This has a damaging effect on the time zone of tolerance.

*Participant 4: "The biggest factors are the communication and the understanding of the scope. We've had other failures, but communication is really key."*

*Participant 9: "That's why I say communication is important, because if I know what's going on, I can relay to my superiors what's going on and we can both make a decision on a way forward and planning. Either work around it or halt or carry on with what you were doing."*

One participant highlighted the importance of recovery time compared to response time

Participant 11: “Recovery time, without a question of doubt. I will sacrifice the cost for response time, because not keeping to recovery times has far bigger implications for the business.”

From the analysis, it is evident that customers expected interactional and procedural recovery mechanisms to concur in parallel. They want to receive regular updates whilst the firm is implementing the necessary procedures to fix the problem. Implementation of distributive justice mechanisms during the time of tolerance were not a priority for any of the participants.

## 5.6 Results: Research question 4

*Research question 4: If customer expectations are met within the time zone of tolerance, how will this influence their future behavioural intentions?*

Customer behavioural intentions include purchasing behaviour and customer citizenship behaviours such as word of mouth, co-creation and reciprocity. The aim of this question was to establish what the behavioural intentions of customers would be if their recovery expectations were met within the time zone of tolerance. Table 6 provides an overview of the number of participants who mentioned behavioural aspects related the time zone of tolerance. The results are furthermore presented, focusing on each of the behaviours identified by the participants

**Table 6:** Overview of the behavioural intentions mentioned by participants

Rank	Behavioural intention	Frequency
1	Purchasing behaviour	11
2	Word of mouth	4
3	Co-creation	3
4	Reciprocity	2

### **5.6.1 The impact of the critical recovery actions on customer behavioural intentions during the time zone of tolerance**

#### **5.6.1.1 Purchasing behaviour**

As the overview of the results show in table 6, most participants highlighted that they will continue doing business with the firm if their recovery expectations were met within the time zone of tolerance. One participant mentioned the importance of a strong relationship when purchasing decisions are made, even if a firm had incurred an incident of poor service recovery:

Participant 4: *“It would be the relationship during that ten years’ time. Was this an isolated incident we managed to recover? If they were onboard and helped us as much as possible to get the equipment running, and from then, everything was fine, they gave support and provided spares. Then we probably would stay with them.”*

If a firm managed recovery actions during the time zone of tolerance well, customers will remain loyal:

Participant 5: *“They manage the service failures well. I’ll choose them 100%. I can speak from experience because that’s exactly what swayed my decision how many times.”*

However, if a firm continues to disappoint the customer during service recovery, the customer will try and find means to move away from this firm. Their future purchasing intent will exclude this firm.

Participant 8: *“If a service provider deals poorly with service failure, we normally would try and motivate for an earlier re-tender of the contract to try and get out of that service contract.”*

Participant 12: *“If I don’t get a good service from that service provider, I will definitely not use that service provider again. So, I will definitely, with the assistance of the procurement division, search the market for another supplier especially if it’s a bad communication, bad service, it’s just logical that we don’t go ahead with that contract.”*

### **5.6.1.2 Customer citizenship behaviours**

Customer citizenship behaviours that emerged from the analysis were word of mouth,

co-creation and reciprocity.

### Word of mouth

From a word-of-mouth perspective, few participants advocated the firm if their critical expectations were met during the time zone of tolerance. One participant admitted he would be less likely to tell others when he is happy with a firm than when he is unhappy with them.

### Co-creation

Co-creation was a third aspect related to behavioural intentions where a few participants confirmed they will work together with the firm to get the problem fixed. Feedback can form part of this process.

Participant 2: *"We are there to assist them and to work together to highlight the points of failure and challenges and find best ways to overcome it."*

On condition repeat failures did not occur too frequently, customers were still willing to assist in the service recovery process:

Participant 7: *"If it's a once-off here or there, then it's a team effort; we work together, and we resolve the problem."*

### Reciprocity

Two participants identified reciprocity as a behaviour they would apply if a firm met their critical expectations during the time zone of tolerance.

Participant 5: *"You extend their business into other places. Their business has grown because of the way they have just dealt with something that has gone wrong."*

Participant 7: *"We have a company whereby we buy a product from and we have no issue with the product; we have no issue with the service but last week they came back to us to say they've made an error on an invoice. This goes back 12 months. I have no problem whatsoever to go back and say, send me an invoice"*

*for what the correct value is and we'll pay you."*

#### **5.6.2 Summary of the findings of research question 4**

Four aspects related to behavioural intentions were identified in the analysis. Purchasing behaviour was highlighted by most participants. Customer citizenship behaviours of word of mouth, co-creation and reciprocity were mentioned to a lesser degree.

### **5.7 Conclusion of findings**

This chapter has presented the results from the seven interview questions. These interview questions were based on the four research questions in chapter three. The drivers of the time zone of tolerance were identified to be customer-firm dynamics, the nature of the failure, customer dynamics, dynamics within the firm, and pro-active measures. Recovery expectations of customers during the time zone of tolerance were unveiled. During this period, interactional justice and procedural justice mechanisms were found to receive preference above distributive justice mechanisms. Communication linked with psychographic elements such as honesty and trust, and in conjunction with timely actions were identified as the most critical recovery actions during the time zone of tolerance. Research question 4 was addressed as the behavioural intentions of customers when their expectations are met during the time zone of tolerance were determined. The following chapter proceeds with a discussion of these findings and proposes a framework to guide the understanding of the drivers of and recovery expectations during the zone of tolerance timeframe and positions the behavioural intention constructs in relation to these aspects.

## **CHAPTER 6: DISCUSSION**

### **6.1 Introduction**

This section discusses the results from the data analysis of the semi-structured interviews in Chapter 5, comparing these with the current literature to identify new insights that contribute to the new concept time zone of tolerance. In addition, this chapter confers the recovery mechanisms customers expect during the time zone of tolerance in the context of the study, closing with a discussion on how managing the time zone of tolerance can impact customer behavioural intentions. The aim of this section is to establish the relevance of the results and build on the current body of marketing literature.

### **6.2 Discussion of research question 1**

*Research question 1: What drivers influence the duration of the service recovery time zone of tolerance within a B2B environment?*

Research question 1 aimed to determine what the participants considered to be drivers of the time zone of tolerance. Except for Hogleve et al. (2017), who found customer emotions to impact the time zone of tolerance, no extant literature could indicate which other drivers influenced this tolerance period. Furthermore, this research question further intended to determine if and how aspects related to the type of failure (Sengupta et al., 2015), the pro-active measures (Qing et al., 2016), the customer (Brock et al., 2013), the firm (Mostafa et al., 2015), and the interrelated customer-firm dynamics (Cambra-Fierro et al., 2015) identified within the current body of literature were relevant in the time zone of tolerance. The research question will be discussed according to the themes identified in Chapter 5.

#### **6.2.1 Drivers of the time zone of tolerance**

As described in the previous chapter, the main identified drivers of the time zone of tolerance are customer-firm dynamics, nature of failure, customer dynamics, pro-active measures and firm dynamics, and will be discussed in the subsequent sections.

##### **6.2.1.1 Customer-firm dynamics**

Customer-firm dynamics refer to the relational and psychological exchanges between the customer and the firm. The participants identified several sub-drivers related to these dynamics that influence the time zone of tolerance, including vendor selection, contractual obligations, customer-firm relationship, lock-in effect, and past experience.

#### Vendor selection

B2B buying structures have evolved from simple bargaining functions to integrated buying teams within network structures (Grewal et al., 2015), and the importance of using the right vendors was confirmed by several participants. Although price of equipment and service play a big role, it was found that customers are willing to pay a premium for reliable equipment and service. Dealing with reputable firms gave the participants more peace of mind, because they required reliable equipment that had minimum failures, as well as spare parts to be readily available. Some participants had learnt the hard way that doing business with smaller or new suppliers is at times not sustainable. Occasionally, these smaller suppliers go bankrupt or disappear. Often, when a new brand is introduced into the market, the spare parts are difficult to obtain. Participant 11 had to replace expensive production machinery due to the unavailability of spare parts, as the distribution agent of this brand of equipment had closed his business and parts were unobtainable. When clients feel that they have selected the right supplier, they are more tolerant when service failures happen, because they believe it is the best service provider they can get. Therefore, firms with good-quality products and reputable brands are in an advantageous position compared to smaller, lesser-known suppliers.

#### Contractual obligation

In alignment with the characteristics of intermediate services (Baines & Lightfoot, 2013), which was the focus of this study, all of the participants confirmed to have SLAs with many firms (Boshoff, 2005) to support the preventive maintenance of critical equipment. A second aim was to have guaranteed response times in the case of failure equipment. Participants explained that some of these SLAs contained stipulated response and recovery times, whilst other contracts only specified response and recovery to be “within a reasonable time”. In some cases, the severity of the failure was often specified and associated with a specific response time depending on priority. Setting clear response and recovery times contributes to the management of the time zone of tolerance. As long as firms respond to complaints and fix the problem within the agreed time, customer

behavioural intentions will remain positive towards the firm. Despite these risk management measures (Story et al., 2017), participants denied having ever imposed penalties on firms. This indicated that customer tolerance extended beyond the formalized terms, and customers preferred alternative resolution to the legal route. Firms can use SLA's to manage customer recovery expectations and consequently their behavioural intentions.

#### Customer-firm relationship

Most participants confirmed the interrelated customer-firm relationship to be a driver of the time zone of tolerance. Chang (2017) stated that customers' loyalty towards the firm is determined by the type of customer-firm relationship. This supports Hogueve et al.'s (2017) findings in that, when a close customer-firm relationship exists, consumers tend to display more leniency towards the company, leading to a longer time zone of tolerance. Trust within the customer-firm relationship was highlighted as a significant element that upholds the trust-commitment relationship required to maintain the time zone of tolerance. The more participants trusted the firm, the longer the tolerance period before they became dissatisfied. However, high trust levels do not guarantee customer loyalty (Ponder, Bugg Holloway, & Hansen, 2016), and many participants kept firm relationships at arm's length. This can possibly contribute to maintaining ethical standards within business.

#### Lock-in situation

Specialised and brand-specific equipment is installed in industrial environments, making customers dependent on these firms for spare parts and technical support. Some participants confirmed that due to the high value of certain industrial equipment, they were in lock-in situations with specific firms. If not managed closely, lock-in situations stand can lead to negative customer behavioural intentions (Schmitz et al., 2016). Being in such a situation inevitably forced the customers to have a longer zone of tolerance, as switching suppliers was not an option. Customers reverted to managing the firm closely to get the desired service.

#### Quality of past performance

A firm's quality of past performance has been acknowledged to impact customer compensation expectations (Fang et al., 2013). The feedback from a few participants



confirmed this aspect to be a driver of the time zone of tolerance. Based on the quality of the past experience with a firm, a customer will have a predetermined expectation of within what time the firm should respond to or fix the failure. This aspect was found to relate to the supplier capabilities and capacity and discussed in another section.

### **6.2.1.2 Nature of failure**

Literature suggests that customers feel more vulnerable when they experience service failure of high severity (Sengupta et al., 2015). Therefore, it was argued that the clients will have a lower time zone of tolerance than in cases where a failure is not considered to be severe (Miller et al., 2000). The interview data from the participants supported an understanding of how the different failure related aspects – failure complexity, failure severity and failure frequency - drive the time zone of tolerance.

#### Failure complexity

The complexity a failure has been identified to influence the time zone of tolerance. This finding is in support of Cambra-Fierro et al. (2015) who confirmed failure context impacts how customers respond to failures. One participant stressed that he will be willing to grant a longer time zone of tolerance if a failure was of a complex nature, as he understood the faulty component would take longer time to repair.

#### Failure severity

Failure severity was highlighted by all participants as a driver that impacted the time zone of tolerance. This finding aligns with Cambra-Fierro et al. (2015). Keeping in mind that Miller et al. (2000) confirmed customer recovery expectations to increase in line with criticality of the failure, this driver is a key contributor to the time zone of tolerance.

#### Failure frequency

The recurrence of failures was determined to be a third failure related driver to impact the time zone of tolerance, and supports both Fang et al. (2013) and Hogleve et al., (2017) who found that repeat failures cause customer recovery expectations to increase.

### **6.2.1.3 Customer dynamics**

Customer dynamics involve internal processes within the customer organization, customer inertia to change suppliers, effects within the network of the customer, and the reputation of the customer. Many participants spoke of challenges within their own organisations that served as drivers of the time zone of tolerance.

#### Customer internal processes

Complex internal processes and constraints within customer organisations were determined to delay the service recovery process, leading to an increased time zone of tolerance towards the firm. Firms have the opportunity to improve the service recovery process and therefore the time zone of tolerance if they apply dynamic capabilities to assist the customer in finding solutions to these internal constraints (Kindström, Kowalkowski, & Sandberg, 2013)

#### Inertia to change suppliers

Some participants choose to stay with certain firms for different reasons. Two participants confirmed that even if the firms they deal with make mistakes, alternative firms could be worse. Most participants rated quality of service higher than price and remained loyal to firms they trusted. This phenomenon aligns with Zhu and Zolkiewski (2015) who confirmed fear of change caused customers to be more tolerant towards service failure, and therefore influenced the time zone of tolerance.

#### Network effects

Complex relational networks exist within B2B environments (Zhu & Zolkiewski, 2015) which implies a service failure can impact not only the customer, but also the customer's customer. This applies to internal and external customers. The analysis agrees with these scholars, as many participants confirmed to be under constant pressure from either management or other stakeholders within the companies they work for.

#### Reputational impact

A few participants highlighted they were responsible to protecting the reputation of the companies they worked for. It was found that reputational impact extended to individual level as well, and the credibility of individuals were harmed when they could not update

their managers and customers timeously on service recovery progress. These results agree with Shin et al., (2018) who emphasised the importance that firms protect the reputations of their customers.

#### **6.2.1.4 Pro-active measures**

Pro-active measures were identified as drivers to the time zone of tolerance. The main drivers that emerged from the analysis are preventive maintenance, system redundancy and spare parts availability.

##### Preventive maintenance

Preventive maintenance is specific to B2B literature, and the findings supported Chen (2016) with participants who confirmed preventive maintenance can improve challenges experienced in service failure better than reactive maintenance and therefore impacts the time zone of tolerance. Firms should aim to schedule the preventive maintenance accurately to ensure the efforts add to the reliability of the system (Qing et al., 2016).

##### System redundancy

The term system redundancy originates from the engineering field and applies when a back-up system is in place which starts working when the main system experiences a failure. Participants highlighted this aspect to impact the time zone of tolerance, as the back-up system mitigated the severity of the failure and extended the recovery time, and contributed to the reliability of a system (Droge et al., 2012).

##### Spare parts availability

A few participants confirmed the value of keeping spare parts as this contributed to shorter recovery time. In some instances, the firm stocks critical parts on behalf of the customer, and in other instances customers keep critical parts on site. The general availability of spare parts is also an important driver. One participant had a supplier who closed, having them to replace the related equipment, as they could not obtain spares for critical equipment. In another instance, a participant explained that some parts had long delivery times which impacted the recovery time. Story et al. (2017) confirmed the value a firm can add by keeping critical parts for customers on hand. This will build trust and can a positive impact on customer behaviours.

### **6.2.1.5 Firm dynamics**

#### Competency and capabilities

Participants highlighted the importance of the firm having the necessary competencies and capabilities and confirmed these attributes to influence the time zone of tolerance. If a firm lacked either of these aspects, it will cause a delay in service recovery, causing frustration on the customer side and harming the time zone of tolerance. If customers perceive a firm to be competent and capable in his service delivery and managing of service failure and recovery, it will promote trust in the customer-firm relationship and can lead to positive customer behaviours (Arlı et al., 2018).

#### Brand reputation

Brand reputation of the firm was noted to be a driver of the time zone of tolerance. Participants associated the brand equity of selected firms with quality and reliability – critical factors in the environments they work. These results complimented the findings of Sengupta et al. (2015) in proving that where customers associate high value with a brand, they tend to have higher tolerance levels during service recovery.

### **6.2.2 Summary of the discussion of research question 1**

Research question 1 identified the main drivers of the time zone of tolerance and verified these drivers within existing literature. The constructs of preventive maintenance and system redundancy – usually part of production and engineering literature – are noted as useful drivers of the time zone of tolerance that firms could consider including in their service recovery strategies.

### **6.3 Discussion of research question 2**

*Research question 2: What are the customer recovery expectations (distributive, interactional and procedural) during the service recovery time zone of tolerance within a B2B environment?*

Research question 2 aimed to determine the recovery expectations of B2B customers

during the time zone of tolerance and is discussed in the subsequent sections.

### ***6.3.1 Recovery expectations within the distributive justice dimension***

Only in cases where equipment was still under warranty or where the wrong equipment was installed did customers expect the free replacement of the spares and equipment. From the analysis, it is noted that compensation in this form did not operate in isolation, and that the extent to which the firm took responsibility for a failure as well as the depth of the customer-firm relationship influenced the level of equity restored after a service recovery.

#### ***6.3.1.1 Free labour***

In certain situations where warrantee work had to be performed, free labour can be accepted as an appropriate means of compensation.

#### ***6.3.1.2 Free training***

In the experience of one participant, some firms provide free training as to avoid contractual penalties being imposed. From a justice perspective, the participant perceived this to be an adequate form of compensation to restore equity. This kind of compensation can also hold advantage for the firm, as this initiative could hold fewer warrantee claims due to the customer be more knowledgeable on the technical operations of the equipment.

#### ***6.3.1.3 Free travel***

Firms usually expect the customer to pay for travel costs, therefore in certain situations this type of compensation can be given to restore equity within the exchange relationship.

### ***6.3.2 Recovery expectations within the interactional justice dimension***

Service recovery actions within the interactional justice dimension refer to the way a firm behaves towards a customer and how fair this consumer feels treated (Brock et al., 2013). All of the participants confirmed communication in various forms and frequencies to be a requirement. The level of relationship between the customer and firm surfaced

as the second dominant aspect that influenced perceived equity within this dimension.

### **6.3.2.1 Communication**

All of the participants were clear on the importance of communication within the time zone of tolerance. Communication does not happen in isolation and concurs with both distributional and procedural recovery aspects. All of the participants emphasised that the main purpose of communication is to be informed of what is going on with the service recovery process, as they have a responsibility to keep stakeholders within their environments updated on the progress. Severity of the failure also required a high level of communication. In cases where failures were categorised by severity, the individuals were more specific on the frequency and method of communication they expected. Providing guidance was an additional requirement to serve an advisory role in the decision making of mitigating actions, whilst service recovery was in progress. Some participants were specific on the way they expected communication to happen during the time zone of tolerance, although their preferences differed.

### **6.3.2.2 Psychographic factors**

Some participants highlighted a few psychographic aspects that contributed towards restoring equity within the customer-firm exchange situation. One of these main factors was the firm's attitude and how the customers wanted to be treated during the time zone of tolerance. Enthusiasm, taking responsibility and displaying empathy were mentioned by a few participants. The other required factors stated as imperative during the time zone of tolerance were honesty and integrity, which strengthened trust within the customer-firm exchange relationship. All of the participants confirmed the importance of honesty. Communication is closely related to this aspect, as all participants said that candid, honest communication from a firm extends their tolerance during the service recovery period. Honesty had a positive influence on customer behavioural intentions.

### **6.3.3 Recovery expectations within the procedural justice dimension**

The procedural recovery actions that emerged within the data were response time, getting the problem fixed, finding the root cause of the failure, and the recovery time.

### **6.3.1 Response time**

Response time is how long it takes for the firm to respond to a complaint, and this was a prominent recovery expectation of all participants. Geographical location can play a role in response time, and firms could consider placing technical support closer to where the customer is if the volume spend and strategic partnership justifies this decision. This could lead to further positive customer behaviour intentions.

### **6.3.2 *Just fix it***

Multiple participants had varying contributions about their expectations on getting a problem fixed. Some participants confirmed that flexibility in procedures supported their recovery expectations during the zone of tolerance. The level of power the customer has, and relationship also influence the extent to which the firm is willing to be flexible.

### **6.3.3 *Root cause analysis***

Determining the root cause of failures is a key requirement to reduce frequency of failures and manage inefficiencies. Certain participants required root cause analysis to be done only when severity of failures justified them to do so.

### **6.3.4 *Recovery time***

All participants highlighted managing recovery time as an important recovery expectation during the time zone of tolerance. Information on the duration of recovery time helps the customer plan. Therefore, communication is always required. The severity of the failure was also found to determine the tolerance the customer has towards the recovery time. When a failure is not critical, and the customer receives regular status updates, the zone of tolerance remains.

### **6.3.5 *Summary of the discussion of research question 2***

The results of this study show that customers prefer interactional and procedural justice mechanisms during the time zone of tolerance. These mechanisms do not function in isolation, and it was determined that customers expect timely communication in parallel with speedy response and recovery time, depending on the situation. The recovery expectations during the time zone of tolerance, as described by participants portrayed

the complexities and interrelated nature of all the justice dimensions. These findings are only in partial agreement with (Del Río-Lanza et al., 2009) who stated procedural justice dimensions to be of greater importance than distributive justice and interactional justice dimensions.

## **6.4 Discussion of the results for research question 3**

*Research question 3: What are the most critical customer recovery expectations (distributive, interactional and procedural) during the time zone of tolerance within a B2B environment?*

### **6.4.1 The most critical recovery expectations during the time zone of tolerance**

Communication and time (both response time and recovery time) were identified as the most important recovery mechanisms expected by customers. Some participants ranked communication to be equally as important as recovery time. In one case, a participant noted that besides communication, understanding the scope is important, as often the customer and firm might have a misunderstanding on the exact scope of service recovery, which leads to the failure not being dealt with in the way the client expected. This has a damaging effect on the time zone of tolerance. One participant highlighted the importance of recovery time compared to response time. From the analysis, it is evident that customers expected interactional and procedural recovery mechanisms to concur in parallel. They want to receive regular updates whilst the firm is implementing the necessary procedures to fix the problem. Implementation of distributive justice mechanisms during the time of tolerance were not a priority for any of the participants.

## **6.5 Discussion of the results for research question 4**

*Research question 4: If customer expectations are met within the time zone of tolerance, how will this influence their future behavioural intentions?*

Customer behavioural intentions include purchasing behaviour and customer citizenship behaviours such as word of mouth, co-creation and reciprocity. The aim of this question was to establish what the behavioural intentions of customers would be if their recovery expectations were met within the time zone of tolerance. Table 6 provides an overview



of the number of participants who mentioned behavioural aspects related the time zone of tolerance. The results are furthermore presented, focusing on each of the behaviours identified by the participants

### ***6.5.1 Purchasing behaviour***

Most participants highlighted that they will continue doing business with the firm if their recovery expectations were met within the time zone of tolerance. A strong customer-firm relationship can play a role when purchasing decisions are made, however this does not apply to all participants. If a firm managed recovery actions during the time zone of tolerance well, customers will remain loyal, however, if a firm continues to disappoint the customer during service recovery, the customer will try and find means to move away from this firm. Their future purchasing intent will exclude this firm.

### ***6.5.2 Customer citizenship behaviours***

Customer citizenship behaviours that emerged from the analysis were word of mouth, co-creation and reciprocity.

#### Word of mouth

From a word-of-mouth perspective, few participants advocated the firm if their critical expectations were met during the time zone of tolerance. One participant admitted he would be less likely to tell others when he is happy with a firm than when he is unhappy with them.

#### Co-creation

Co-creation was a third aspect related to behavioural intentions where a few participants confirmed they will work together with the firm to get the problem fixed. The value of co-creation is receiving increasing attention from scholars (Silva et al., 2017). On condition repeat failures did not occur too frequently, customers were still willing to assist in the service recovery process.

#### Reciprocity

Two participants identified reciprocity as a behaviour they would apply if a firm met their critical expectations during the time zone of tolerance.

### **6.5.3 Summary of the discussion of research question 4**

Four aspects related to customers behavioural intentions were identified in the analysis. Purchasing behaviour was highlighted by most participants. Customer citizenship behaviours of word of mouth, co-creation and reciprocity were mentioned to a lesser degree.

## **6.6 Conclusion of findings**

These interview questions were based on the four research questions in chapter three. The drivers of the time zone of tolerance were identified to be customer-firm dynamics, the nature of the failure, customer dynamics, dynamics within the firm, and pro-active measures. Recovery expectations of customers during the time zone of tolerance were unveiled. During this period, interactional justice and procedural justice mechanisms were found to receive preference above distributive justice mechanisms. Communication linked with psychographic elements such as honesty and trust, and in conjunction with timely actions were identified as the most critical recovery actions during the time zone of tolerance. Research question 4 was addressed as the behavioural intentions of customers when their expectations are met during the time zone of tolerance were determined. The following chapter proceeds with a discussion of these findings and proposes a framework to guide the understanding of the drivers of and recovery expectations during the zone of tolerance timeframe and positions the behavioural intention constructs in relation to these aspects.

## **CHAPTER 7: CONCLUSION AND RECOMMENDATIONS**

### **7.1 Introduction**

This study set out to discover the main drivers of the time zone of tolerance, uncover the service recovery expectations of customers during this time zone of tolerance, and explore how managing the time zone of tolerance can impact customer behavioural intentions. The time zone of tolerance is a new concept within marketing literature (Hogreve et al., 2017), and despite the fact that customer emotions of anger influence the duration of this tolerance, the need arose to explore the dynamics within this tolerance to gain a deeper understanding of the value it might hold to both academics and business.

### **7.2 Principal findings**

The principal findings relate to the drivers of the time zone of tolerance, recovery expectations of customers during this period, and the behavioural intentions which could be affected as a result of how the time zone of tolerance is managed. The key findings are displayed in figure 8 by form of a framework that illustrates the context of the time zone of tolerance in relation to the other constructs.

#### ***7.2.1 Drivers of the time zone of tolerance***

The study identified what participants perceived to be the main drivers of the time zone of tolerance. These main drivers are nature of failure, customer-firm dynamics, customer dynamics, firm dynamics, and pro-active measures. These drivers are a fusion of relationship marketing, engineering and production constructs. This can be attributed to the strong technical backdrop of the industrial environment in which this study was done.

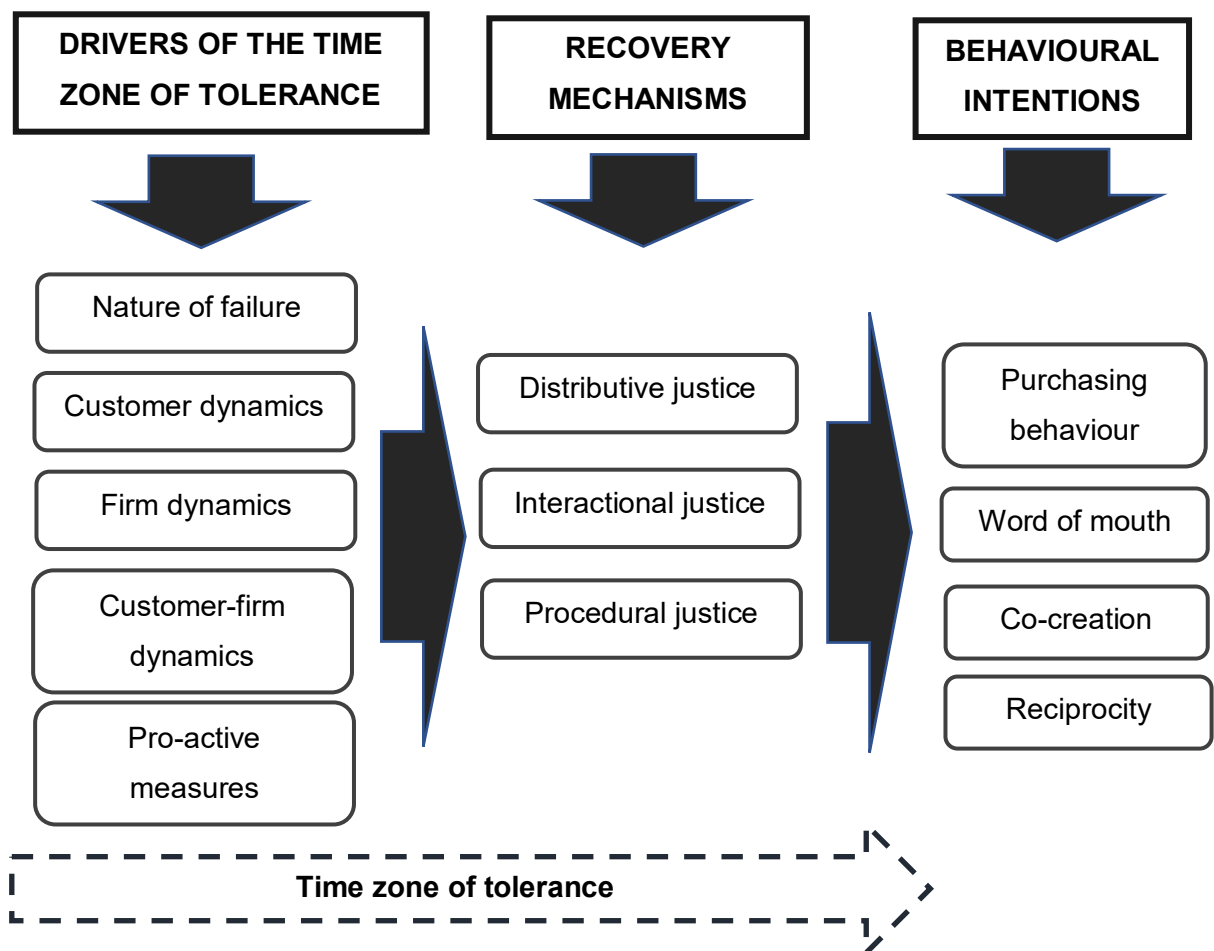
Within each main driver, a few sub-drivers emerged, as displayed in figure 5. The nature of the failure and customer-firm dynamics were most frequently mentioned. Failure severity is a key driver, and due to the complexity and interconnectedness of all drivers, further exploration in this area is justified.

#### ***7.2.2 Customer recovery expectations during the time zone of tolerance***

This study found customer recovery expectations leaned towards interactional justice and procedural justice. Participants confirmed the importance of effective communication when a failure has occurred. Frequent status updates are required as customers in this environment must keep the stakeholders (managers, customers, colleagues) informed. Response time is also a critical requirement. Firms need to have mechanisms in place that allows for quick response to customer complaints. Customers want to know something is being done to help them, and they need to be informed, whether by phone, e-mail or in person. Firms that manage this well, will gain customer trust and loyalty. Brutal honesty is a prerequisite of all the participants who were interviewed. They are far more forgiving when a firm admits its mistake and does everything to fix the problem and compensate them accordingly.

### ***7.2.3 Customer behavioural intentions***

The study found that if the drivers during the time zone of tolerance are managed well, and customer recovery expectations are met, it will lead to positive purchasing behaviour, positive word of mouth, co-creation which allows for a collaborative approach in managing the service recovery, and reciprocity.



**Figure 8:** A proposed service recovery time zone of tolerance framework

### 7.3 Implications for firms

This study has provided insights into the service recovery time zone of tolerance, and highlights a few practical measures firms can take to improve their service recovery processes and drive positive customer behavioural intentions:

- SLA's can serve as value proposition to customers if accompanied with cost and service benefits. This will allow the firm a closer relationship with the customer, and in a position to adapt according to customer requirements
- The customer wants to feel heard. A firm must have customer centric structures and processes in place to anticipate and meet customer recovery expectations and ensure continues positive purchase intentions and customer citizenship behaviour.

## **7.4 Limitations of research**

The explorative nature of this qualitative study limits the generalisability to other contexts and industries. Additional limitations that were identified are as follows:

- Interviewer bias might have influence data quality if the manner and tone in which the interviewer directed questions towards the participants conveyed personal opinions and beliefs (Saunders et al., 2016).
- A limited number of individuals in the Gauteng and Kwa-Zulu Natal provinces were interviewed, therefore geographical bias may have influenced the data.
- The small sample size limits the generalisability to other industrial environments
- The sample consisted of individuals of a technical and managerial background. The opinions of individuals involved in B2B environment in other sections within organisations were not obtained.

## **7.5 Suggestions for future research**

Based on the insights gained from this study, the following are suggestions for future research:

- Hogleve et al. (2017) confirmed the emotion of anger to influence compensation expectations, and scholars are increasingly starting to research customer emotions within the context of service failure and recovery. However, it is not yet known what other emotions customers experience during the zone of tolerance.
- To determine relevance, the proposed framework or aspects thereof can be tested in various contexts
- Quantification of the drivers of the time zone of tolerance
- Quantification of the recovery expectations of customers during the time zone of tolerance
- Establish the relation between certain drivers, recovery expectations and behavioural intention constructs

## **7.6 Conclusion**

Extant literature provides a clear understanding of customer recovery expectations within certain industries and contexts, except for the fact that customer negative emotions remain flat during the time zone of tolerance. There is limited knowledge on the service

recovery expectations customers hold within this period. The meaning of the time zone of tolerance within service recovery is a newly explored concept, and the value of understanding recovery expectations as well as the drivers that can positively influence the time zone of tolerance is recognised. Current literature presents service recovery expectations in one dimension of service recovery time. This leads to the interpretation that the same recovery actions can be implemented throughout the service recovery period to ensure positive customer behavioural intention. Compared to extant literature, the findings of this study gave an indication that customer service recovery expectations differ within the time zone of tolerance. Given the problem statement and literature reviewed, gaining a deeper understanding of the time zone of tolerance provides firms the opportunities to optimize resource allocations where customers expect them to. Findings generated from this research project can allow firms to align their service recovery strategies with customer service recovery expectations, and optimally manage this tolerance period to limit economical and psychological losses to both the customer and the firm.

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## ANNEXURE A: CONSENT TO ACCESS CUSTOMER INFORMATION

York International (SA) Inc  
Registration number: 1995/001173/10  
VAT Number: 4870147602  
P.O. Box 469, 42 Electron Avenue, Isando, 1600  
Tel +27 921 7100 Fax +27 921 7200



GIBS Research Ethics Committee

13 June 2018

Dear Sir / Madam,

### RE: CONSENT TO ACCESS CUSTOMER INFORMATION FOR RESEARCH PURPOSES

On behalf of Johnson Controls South Africa, I hereby give consent that Susara Homan, currently a registered MBA student at GIBS, with student number 17386226, will be provided a list of service customers by the company. In order for her to proceed with data collection, she will contact selected customers and obtain written individual consent from each potential participant prior to proceeding with semi-structured interviews. This serves as part of her Integrated Business Research project which forms part of her MBA studies.

The company will not be involved in any other research activities the student may need to perform.

The data provided will be treated with confidentiality.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Neil A. Cameron', written over a horizontal line.

Neil A. Cameron  
Area General Manager – Africa Direct Region

Durban  
P.O. Box 47319 Greyville 4023  
47 Island Circle Unit 10 Riverbend Circle  
Riverhorse Valley, Durban 4000  
Tel +27 31 669 2626 Fax +27 31 669 2744

Cape Town  
P.O. Box 37033 Champet 7442  
5 Stepmar Building, 27 Stella Road, Montagu  
Gardens, Milneron 7441  
Tel +27 21 551 3012 Fax +27 21 551 4176

Carltonville  
P.O. Box 1371 Carltonville 2500  
35 Haulage Street, New Industrial Area, 2499  
Tel +27 18 786 1062/3 Fax +27 18 787 3213

Director: JM Williams (American), Representative NA Cameron

## ANNEXURE B: INTERVIEW CONSENT FORM

### INTERVIEW CONSENT FORM

#### **BUSINESS-TO-BUSINESS CUSTOMER COMPENSATION EXPECTATIONS DURING THE SERVICE RECOVERY ZONE OF TOLERANCE**

**Researcher:** Susara (Sarie) E. Homan, MBA Student at the Gordon Institute of  
Business Science, University of Pretoria

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Dear Participant,

I am conducting research on service failure and recovery and am trying to find out how customers want to be compensated during the recovery time zone of tolerance. Our interview is expected to last 45 minutes to 1 hour and will help us understand which factors influence your tolerance in waiting during the service recovery process, what you expect the service provider to do during this period, and how the compensation mechanisms influence your relationship with the service provider.

**Your participation is voluntary, and you can withdraw any time without penalty.**

The audio recording of this interview is also voluntary, and you may choose not to be recorded. All data will be kept confidential. Quotations will remain anonymous.

If you have any concerns, please contact my supervisor or myself. Our details are provided below:

Sarie Homan

[17386226@mygibs.co.za](mailto:17386226@mygibs.co.za)

082 523 9097

Prof Danie Petzer

[PetzerD@gibs.co.za](mailto:PetzerD@gibs.co.za)

011 771 4000

Participant Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Researcher's Name: Sarie Homan

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## ANNEXURE C: INTERVIEW SCHEDULE

**Participant Job Title:** \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_

---

Thank you for your willingness to meet with me today. I really appreciate your time and contribution towards this research.

The title of the research is “Business-to-Business customer compensation expectations during the service recovery zone of tolerance”. A service failure can be defined as any event when a breakdown of equipment or systems occur or when the service provider does not perform according to the agreed terms of service delivery. Compensation expectations are what you expect the company to do during the service recovery period. The zone of tolerance forms part of service recovery time and can be described as the grace period you grant the service provider to handle the service failure whilst you are waiting for them to resolve the problem.

The aim of this interview is to determine your compensation expectations during the zone of tolerance, establish which of these expectations are the most important to you, and determine how this influences your relationship with the service provider. We also want to get a deeper understanding of which factors influence your compensation expectations. What we learn from this study, can help service providers improve the management of recovery time through effective compensation mechanisms during the zone of tolerance.

The information shared in this interview will be confidential and you will remain anonymous, therefore I encourage you to speak freely. Before we commence, may I request you to sign the consent form and confirm that you approve that I take written notes and record the interview with an audio recording device?

Let us start:

When something goes wrong on site and critical equipment fails, you report the problem to the service provider and wait for them to come and repair it. Whilst you wait for the problem to be sorted, there is a waiting period (or tolerance period) when you still have



patience with the service provider and are still satisfied with them even if the problem itself has not been resolved yet. The focus of this interview will be specifically on factors that influence how long you expect this period to be, how you expect to be compensated during this period, and how this influences your relationship with the service provider.

**Questions to obtain additional customer information:**

- a. Could you describe your function at the company/institution you work for?
- b. How many years have you worked in this environment?

**Question 1: When there is a breakdown of equipment or the system, what are the factors that influence how long you are willing to wait for the problem to be fixed?**

Prompts:  
*Service level agreement*  
*Previous experience*  
*Relationship*

**Question 2: During this waiting time do you expect the service provider to compensate you? If so, how should the service provider compensate you?**

*Prompts: monetary compensation (credit / free repairs)*

**Question 3: During this waiting time do you expect the service provider to interact with you? If so, how should the service provider interact with you?**

*Prompts: communication (status updates / apology / honesty)*

**Question 4: During this waiting time do you expect the service provider to implement special procedures and actions? If so, what kind of procedures and actions do you expect the service provider to implement?**

*Prompts: quick response time / flexibility / quality improvement / pro-active approach*

**Question 5: Which of the service provider actions would you value the most (are the most critical to you) during this waiting time?**

**Question 6: If you are happy with the way the service provider handled the situation during the waiting period, what do you think will the effect on your relationship be?**

**Question 7: If you had to choose all over again, would you appoint this same supplier to provide the services?**

## ANNEXURE D: ETHICAL CLEARANCE

**Gordon  
Institute  
of Business  
Science**  
University  
of Pretoria

17 August 2018

Homan Susara

Dear Susara

*Please be advised that your application for Ethical Clearance has been approved.*

*You are therefore allowed to continue collecting your data.*

*Please note that approval is granted based on the methodology and research instruments provided in the application. If there is any deviation change or addition to the research method or tools, a supplementary application for approval must be obtained*

*We wish you everything of the best for the rest of the project.*

*Kind Regards*

GIBS MBA Research Ethical Clearance Committee

## **ANNEXURE E: ATLAS.TI CODEBOOK**

### **Individual Codes**

BI: Co-creation  
BI: Customer Citizenship Behaviour  
BI: Purchasing behaviour  
BI: Reciprocity  
BI: Word-of-Mouth  
DJ: Compensation  
DJ: Compensation\_Liability Cover  
DJ: Compensation\_monetary  
DJ: Compensation\_Penalties  
DJ: Compensation\_Replacement spares  
DJ: Free labour  
DJ: Free training  
DJ: Free travel costs  
DJ: Repairs done under warrantee  
DJ: Work performed under guarantee  
Driver: Customer\_Inertia  
Driver: Customer\_Internal Processes  
Driver: Customer\_Network effects  
Driver: Customer\_Reputational impact  
Driver: CustomerFirm\_Contractual obligations  
Driver: CustomerFirm\_Level of Relationship  
Driver: CustomerFirm\_Lock-in effect  
Driver: CustomerFirm\_Past experience  
Driver: CustomerFirm\_Service Level Agreement (SLA)  
Driver: CustomerFirm\_Vendor selection  
Driver: Failure\_Complexity  
Driver: Failure\_Frequency  
Driver: Failure\_Severity  
Driver: Firm\_Brand reputation  
Driver: Firm\_Capability & Competency  
Driver: Firm\_Original Equipment Manufacturer  
Driver: Pro-active\_Preventive maintenance  
Driver: Pro-active\_Spare parts\_availability and lead time  
Driver: Pro-active\_System redundancy

IJ: Communication: Telephonic conversation  
IJ: Communication\_Advising of possible mitigations and investments  
IJ: Communication\_Apology  
IJ: Communication\_broad reference  
IJ: Communication\_by phone  
IJ: Communication\_candid  
IJ: Communication\_In person  
IJ: Communication\_in writing  
IJ: Communication\_Status updates  
IJ: Communication\_Status updates: Photo reports  
IJ: Communication\_Timeous  
IJ: Psychological\_Empathy  
IJ: Psychological\_Enthusiasm to help  
IJ: Psychological\_Honesty & Integrity  
IJ: Psychological\_Taking responsibility  
IJ: Psychological\_Trust  
IJ: Relationship\_General  
Most critical: Communication\_Active  
Most critical: IJ\_Status updates  
Most critical: Proc & Admin - Create an action plan  
Most critical: Proc & Admin - Find cause of the failure  
Most critical: Recovery Time  
Most critical: Response Time  
PJ: Action plan  
PJ: Being proactive  
PJ: Consistency  
PJ: Critical spares kept by supplier  
PJ: Customer - Keep critical spares on site  
PJ: Disaster recovery measures  
PJ: Execute on the promised time  
PJ: Flexibility  
PJ: Gather the right information in the process  
PJ: Going the extra mile  
PJ: How we deal with failures  
PJ: Implement mitigating factors  
PJ: Level of service provided\_\_professional  
PJ: Procedures and administration

PJ: Procedures\_Purchase Orders  
PJ: Quality Improvement  
PJ: Quality Improvement\_Product  
PJ: Quality of workmanship  
PJ: Recovery Time  
PJ: Response Time  
PJ: Root cause analysis  
PJ: SP - Fix the failure  
PJ: Supervisor intervention  
Service Failure\_General comments  
Zone of Tolerance\_General comments

### **Code Groups**

RQ1: T1 - Nature of the Failure  
RQ1: T2 - Customer dynamics  
RQ1: T3 - Firm dynamics  
RQ1: T4 - Customer-Firm Dynamics  
RQ1: T5 - Pro-active measures  
RQ2: T1 - Distributive Justice Dimension  
RQ2: T2 - Interactional Justice Dimension  
RQ3: T1 - Interactional Dimension"  
RQ2: T3 - Procedural Justice Dimension  
RQ3: Most critical recovery expectations  
RQ4: Behavioural intentions