

Title

PORT CONGESTION CHALLENGES FACED BY THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY: AN OEM CASE.

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requirements for the degree of Master of Business Administration in the field
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Declarations

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 University of the Witwatersrand. It has not been submitted before for the degree or examination in any other university. I further declare that I have obtained the necessary authorisation from BMW South Africa and the Port of Durban as well as consent to carry out this research.

Yvonne Dube 

Date 28/01/2025

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Acronyms

BMW	Bayerische Motoren Werke
GDP	Gross Domestic Product
GPS	Global Positioning System
NAAMSA	National Association of Automobile Manufacturers of South Africa
OEM	Original Equipment Manufacturers
TPT	Transnet Port Terminal

Definition of terms

Keywords: *inbound-outbound, port congestion, port infrastructure, resource allocation*

- I. **Port congestion** is defined as "a situation where vessels have to wait for a long time before entering the port as all port capacities are occupied with clearing cargo backlogs" (Maduka, 2004: p. 204).
- II. **Resource allocation** is defined as "a process of assigning scarce resources among various units to produce goods or services" (Eddrgash, 2022).
- III. **Inbound logistics** involves receiving, storing, and distributing raw materials and components necessary for production (Rastogi, 2023).
- IV. **Outbound logistics** can be defined as the process related to the movement and storage of products from the end of the production line to the end user (Liberatore & Miller, 2015: p 1)
- V. **Port disruptions** is defined as insufficient port berths or low-depth port channels or any shortages in port facilities, such as not enough tugboats or quayside cranes or any causes that eventually reduce port service operations and delay ships at its berths (Eddrgash, 2022).

Chapter Outline

This study will comprise five chapters, which will begin with a background to the study and the literature to support the study, followed by a discussion of the research methodology that this study will adopt. Then, the findings and discussion concerning the research will be made, followed by recommendations and a concluding chapter.

Below is the outline that highlights the discussion for each chapter.

Chapter One: This chapter covers the background and introduction to the study, including the problem statement and rationale.

Chapter Two: In this chapter, the literature reviewed for this study is discussed, and a theoretical framework and proposed conceptual framework is outlined.

Chapter Three: This chapter discusses the research methodology that was followed for this study; this chapter also indicates how data was collected and analysed for this study.

Chapter Four: This chapter will provide the findings of this research study and discusses the findings of Chapters one and two.

Chapter Five : This chapter will include the conclusion and recommendations based on the findings and discussions presented in Chapter four.

CHAPTER 1: INTRODUCTION

1.1 Statement of purpose

This study examines the causes of Durban's port congestion to assist decision-makers in resource allocation and long-term infrastructure planning. It emphasises the need for scholars and industry practitioners to identify congestion causes and devise practical solutions accurately (Peng et al., 2022).

1.2 Background of the study

The South African automotive industry significantly drives the nation's economy, contributing 4.9% to the gross domestic product (GDP) in 2023, with vehicle and automotive component manufacturing alone contributing 21.77% to domestic manufacturing output (NAAMSA, 2023a; NAAMSA, 2023b). Employing approximately 112,000 individuals, it is one of the largest manufacturing sectors in the country, emphasising its economic importance (NAAMSA, 2023a; NAAMSA, 2023b). Supported by government initiatives, its role in import-export dynamics highlights its strategic significance (NAAMSA, 2023a; NAAMSA, 2023b).

The South African automotive industry contributes significantly to the GDP, accounting for 4.9%, or R3251.4 billion, in 2023 (Moshikaro-Amani & Mahlangu, 2024; NAAMSA, 2023a; NAAMSA, 2023b). However, the industry faces challenges caused by a complex supply chain structure, including issues with local manufacturing competitiveness and international logistics such as port infrastructure and road transportation (ReportLinker, 2024; Ambe, 2014). These challenges highlight the necessity for adaptive strategies to ensure industry resilience and sustained economic contribution.

The South African automotive industry's reliance on imports and exports exposes it to port-related disruptions, impacting both inbound raw materials and outbound products (Schliebener & Nickel, 2021; Takii, 2004). Ports play a vital role in the automotive supply chain, facilitating the movement of vehicles, components, and units (Mlambo, 2021). However, challenges like global competition, unreliable rail transport, and high port costs present significant obstacles (Mlambo, 2021). Moreover, exposure to international markets makes the industry vulnerable to economic fluctuations and geopolitical tensions (UNCTAD, 2023; Gasper, 2022), and persistent hindrances impede the adoption of best practices (Nze & Onyemechi, 2018). Proactive measures are essential

for stimulating supply chain resilience and sustaining industry growth (Nze & Onyemechi, 2018; Mlambo, 2021).

1.3 Research problem and research gap

Despite governmental efforts, South African port infrastructure inefficiencies hinder the automotive industry's growth, delaying integration into global trade networks (Essi et al., 2020; Mlambo, 2021). While the port of Durban addresses congestion, variations persist across ports (Michael, 2019; Mlambo, 2021). Current strategies lack conclusive effectiveness (Essi et al., 2020). Identifying comprehensive solutions is crucial to alleviating congestion, enhancing cargo movement efficiency, and supporting industry development and economic growth (Nze & Onyemechi, 2018).

Sea trade plays a major role in the process of globalisation, making a significant contribution to the economies of the countries involved, as more than 80% of global trade is conducted by sea (Munim & Schramm, 2018). The automotive industry's critical aspects of logistics performance include logistics costs and port supply chain reliability (Munim & Schramm, 2018). The economic well-being of a country that has ports, relies heavily on the performance and infrastructure of its ports, which serve as essential transportation hubs linking shippers and recipients of merchandise (Hoa & Haasis, 2017). Ports also play a crucial role in establishing and maintaining collaborative relationships with traditional partners such as shipping companies, terminal operators, and automotive companies (Hoa & Haasis, 2017).

A gap exists regarding the impact that port congestion has on the original equipment manufacturers' (OEM) supply chain. This study aims to fill that gap by examining port congestion's causes within the automotive industry, since South Africa relies on receiving cargo via sea and on-road transportation to ensure that the goods reach the rest of the population (Hoa & Haasis, 2017). The port of Durban plays a significant part in the South African economy, and its potential inefficiencies have significant implications for jobs and the economy of Durban and South Africa (Dyer, 2014).

1.4 Research questions

Objectives of this study

The primary objective of this study is to examine the nature of port congestion challenges within the automotive industry. A set of research questions is proposed to guide the study in achieving the primary objective.

Research questions

- 1). How does the quality of port infrastructure, particularly the inadequacy of rail systems in South African ports, influence port congestion?
- 2) What strategies can enhance operational productivity competitiveness and mitigate congestion in these ports?
- 3) How do port operators balance the demand and supply aspects of gate services to mitigate congestion at port accesses and gates?
- 4) What financial impact does port congestion have on the OEMs?
- 5) How do weather conditions, seasonality, and unexpected events affect congestion levels at port gates, and how can they be effectively managed?
- 6) How does port congestion impact an OEM's competitiveness when vehicles are jammed at port because of port congestion?

1.5 Rationale

Various studies have explored port congestion, focusing on container slot allocation (Wang et al., 2020), shipment delivery time (Liu et al., 2023), socio-economic impacts (Fattah et al., 2022), and logistics networks (Nze & Onyemechi, 2018). However, a gap exists regarding its impact on the OEM supply chain. This study aims to fill that gap by examining the causes of port congestion within the automotive industry. From the perspective of the port authorities, problems of congestion at ports are entirely undesirable, especially if they increase and become out of control, thus seriously hindering port operations, slowing port developments, and it is burdening the South African economy (Onwumere & Egbo, 2008). Port congestion thus has a negative impact on the automotive industry by putting pressure on OEM distribution or supply chain

systems. This pressure leads to an increase in car carriers' rates, vehicle pricing and freight rates. The findings of the study will further facilitate the maritime logistics chains and come up with proper solutions to avoid congestion situations at ports. All controllable and relatively uncontrollable causes of congestion will be identified. The findings can be performed by considering the role of all players in any investigation that tries to explore and mitigate the congestion problems at ports.

1.6 Delimitations of the study

This study is proposed for the automotive industry, specifically BMW South Africa and the port of Durban terminal, with the scope of the study focusing on port congestion challenges that impede the performance of OEMs. This study is set up within South Africa and focuses on a selected logistics and supply chain organisation. Therefore, the information gathered in this research is specific to KwaZulu-Natal province and excludes shipment companies operating in other provinces.

1.7 Assumptions

Prolonged port dwell times hinder the integration of sub-Saharan economies into global trade networks; research could explore causes and economic implications. Despite mitigation efforts, variations in congestion persist at the port of Durban; therefore, research could identify triggers, understand causes, and propose strategies. Furthermore, current congestion management approaches may lack effectiveness; this study could assess efficacy and explore alternatives. An urgent need exists for comprehensive solutions to alleviate port congestion and enhance cargo movement efficiency; research could focus on development and evaluation. Improving port efficiency is crucial for the automotive industry and economic growth in South Africa; research could analyse the impact on sectors and overall development.

CHAPTER 2: LITERATURE REVIEW AND THEORETICAL FRAMEWORK:

2.1 Introduction

The literature about the port congestion problem is reviewed in this chapter to gain a deeper understanding and knowledge about the phenomenon, especially the body of knowledge regarding the congestion definitions, common reasons behind the port congestion problem, and the potential solutions for it, and understand the theoretical conception of the port congestion problem for the automotive industry.

2.2 Definition of port congestion

Various literature has reviewed port congestion over the last decade (Magibho, 2017; Nze & Onyemechi, 2018; Dragović et al., 2006; Neagoe, 2021). To better understand what port congestion means and how it relates to this study, Table 1 summarises the definitions found in a review of various related literature.

Table 1: Definitions of port congestions

Definition	Sources
Port congestion can be defined as "a situation where vessels have to <i>wait for a long time</i> before entering the port as all <i>port capacities are occupied</i> with clearing cargo backlogs."	Maduka (2004, p. 204)
Port congestions are "a situation <i>where ports' capacities cannot cope with the increasing demand on them</i> ."	Dragović et al. (2006, p. 44)
Port congestion is associated with <i>delays, queuing, and extra time</i> for the voyage and the dwelling of ships and cargo at the port, which always has <i>unpleasant consequences</i> for the logistics and supply chain.	Gidado (2015, p. 1)
Port congestion is defined in its effects on the supply chain as a situation that <i>causes unpleasant consequences</i> on the logistics system and the	Nze and Onyemechi (2018)

supply chain because of delays and extra time for vessels and cargoes at ports, which usually impose extra charges on customers.	
Port congestion is defined as the presence of <i>delays along a physical pathway caused by the presence of others</i> .	Neagoe et al. (2021, p. 2)
Port congestion is a situation that arises <i>when port capacity cannot keep up with the increase of ship traffic to a port</i> .	Eddrgash (2022, p. 19)

Source: Author's conceptualisation

Table 1 illustrates how port congestion can be *perceived as an inconvenience and source of frustration* for a firm importing and exporting products from ports to different countries (Neagoe et al., 2021). For this study, port congestion can negatively affect the movement of vehicles. Furthermore, Eddrgash (2022) contends that ports play critical roles at the intersection of multiple independent supply chains and have an enormous potential to improve supply chain competitiveness; thus, congestion at ports may negatively impact the economy if not managed correctly. Additionally, Davies and Kieran (2015) posit that the most visible consequences of congestion are increased truck turnaround (or service) times in ports. They argue that congestion also generates significant uncertainty for vehicle manufacturers as it affects the sale of vehicles, or it may potentially affect the end user. One of the risks of port congestion for OEMs, highlighted by Gidado (2015), is the increase of accidents that may arise on the roads by car carriers to deliver the vehicles urgently to end customers or dealerships. Other effects of port congestion highlighted by Neagoe et al. (2021) and Nze and Onyemechi (2018) include increased inventory, warehousing, transportation costs, and decreased overall transport performance by vehicle carriers. The following sections will discuss the causes of port congestion, the impact of port congestion and the management strategies for port congestion.

2.3 Causes of port congestion

Generally, ports are essential logistics chain nodes in maritime transportation and seaborne trade (Eddrgash, 2022). However, port congestion is a common problem that most ports worldwide have suffered from at various times. Bolat et al. (2020) argue that

the port congestion phenomenon has been the focus of numerous scholars in the literature on port operation and management (Maduka, 2004; Liu et al., 2023; Wang et al., 2020; Gidado, 2015). Most of these scholars have focused on two critical aspects of the problem and two strategies for solving and eliminating this problem: the supply and the demand sides. The supply side's technique concentrates on increasing port capacities (Belcore et al., 2023), such as investing in new berths, port storage area capacity, and port gate capacity. This study will discuss the causes of port congestion under insufficient infrastructure capacity, inefficient port operations, supply chain readiness, supply chain disruptions and insufficient berth capacity.

2.3.1 Insufficient infrastructure capacity

Port congestion in Africa, especially in South Africa, recurs seasonally because of inadequate planning, equipment, and infrastructure (Nze & Onyemechi, 2018; Gidado, 2015). Eddrgash (2022) stresses the importance of port equipment like cranes and forklifts in enhancing efficiency and reducing congestion. Similarly, Rahimi et al. (2008), Oruwari (2021), and Vu (2022) highlight the significance of handling equipment, especially in container terminals. Studies often address technical issues such as infrastructure inadequacy (Eddrgash, 2022; Rahimi et al., 2008; Oruwari, 2021; Vu, 2022). Improving infrastructure is vital to boosting throughput and alleviating congestion (Komaromi et al., 2022; Naudé, 2016). However, increased demand may lead to vessel queuing at anchor areas (Naudé, 2016). Decision-makers face challenges in developing infrastructure to meet rising demands effectively (Wang & Wang, 2019; Humphreys et al., 2019; Mchunu, 2021; Islam & Olsen, 2014). Wang and Wang (2019) argue that improving and developing the port infrastructure requires port capacities that can cope with the increased demand on its resources to minimise congestion situations. Arguably, Humphreys et al. (2019) and Mchunu (2021) note that where and how to develop the existing port infrastructure for rising port service demands is the most critical dynamic dilemma that decision-makers face. Therefore, the following proposition is proposed for this study.

Proposition 1: Inefficiencies in infrastructure significantly contribute to port congestion, which impacts the South African automotive industry's delivery time.

2.3.2 Inefficient port operations

Port congestion in Africa, particularly in South Africa, occurs seasonally because of poor planning, insufficient equipment, and lacking infrastructure (Nze & Onyemechi, 2018; Gidado, 2015). Eddrgash (2022) argues the critical role of port equipment like quay cranes, forklifts, and tugboats in ensuring efficient operations and reducing congestion. Similarly, Rahimi (2008), Oruwari (2021), and Vu (2022) emphasise the importance of handling equipment, particularly in container terminals, to improve efficiency. Research often explores technical issues like inadequate infrastructure and capacities (Komaromi et al., 2022). Upgrading port infrastructure is necessary to increase capacity and minimise congestion (Komaromi et al., 2022; Naudé, 2016). Rail system failures in South Africa exacerbate pressure on road transportation, contributing to congestion (Okpomo, 2021). Dragović et al. (2006) state that port expansion or development must be considered in the light of port objectives, according to the national or regional point of view for economical transport. However, in Africa, particularly in South Africa, the failure of its rail system has caused more pressure on road transportation in moving vehicles from and to ports, eventually leading to congestion of the port gates and port accesses (Okpomo 2021). Therefore, the following proposition is proposed for this study.

Proposition 2: Prolonged dwell times in ports pose a significant barrier to the efficiency of port operations.

2.3.3 The importance of ports in supply chain

As highlighted in Section 1.2, South Africa is challenged by poor infrastructure. Much research focuses on the evolving role of ports in supply chains (Loh & Van Thai, 2014). Ports have transitioned from merely storing cargo to providing critical functions like distribution and processing (Alavi, 2019). The third generation of ports emphasises cooperation and information sharing facilitated by technology (Rein, 2014). Challenges faced by ports in integrated supply chains have been empirically examined (Rein, 2014). Port congestion adversely affects supply chain networks, increasing shipping costs caused by labour, fuel, and schedule adjustments (Guan, 2009). Therefore, the following proposition is proposed for this study.

Proposition 3: Supply chain readiness significantly affects the causes of port congestion and the movement of vehicles and vehicle components.

2.3.4 Supply chain disruptions from the port's perspective

In the literature, studies suggest that poor management and inefficient operations, rather than equipment shortages or infrastructure deficiencies, are the primary causes of port congestion (Nikghadam et al., 2022). Ports must enhance operational productivity and manage facilities more efficiently to mitigate congestion and increase competitiveness (Nikghadam et al., 2021). As ports are vital nodes in global supply chains, the range of potential port-related risks affecting the entire supply chain will expand due to complex operations and interactions with other players (Loh & Van Thai, 2014). Alavi et al. (2020) highlight the complexity of port supply chains compared to manufacturing supply chains, while Pallis and Vaggelas (2019) argue that port supply chains are increasingly market-driven to meet customer demands. Berth capacity is crucial in reducing port congestion, which will be further discussed in the next section. The following proposition is proposed for this study:

Proposition 4: Supply chain disruption significantly impacts the causes of port congestion and the movement of vehicles and vehicle components.

2.3.5 Inefficient berth capacity

Other scholars, like Alvarez et al. (2010), studied and compared berth allocation to port berths. Fararoui and Black (1992) took a different direction in investigating the best allocation port berth plans. They argued that to reduce the effect of congestion situations, they proposed a system of berthing priority that considers the cost of delay to ships. In the literature, most research studies have agreed that the policy of 'first-come, first-served' for assigning ships to port berths is insufficient and can cause an increase in the waiting time for ships. Alvarez et al. (2010) argue that the 'first-come, first-served' rule is nearly impossible unless all arriving vessels and cargoes are identical. Meng et al. (2009) and Container-Xchange (2022) suggest that port managers should effectively manage berth allocation strategies, as this can help to reduce the vessels' waiting time at congested ports or container terminals. Port managers must reduce congestion problems at their ports by balancing the cost of ships' waiting time and the economical use of their allocated resources (Dragović et al., 2006). In the literature, most research studies have agreed that the policy of 'first-come, first-served' for assigning ships to port berths is insufficient and can cause an increase in the waiting time for ships. Therefore, the following proposition is proposed for this study:

Proposition 5: Inefficient berth capacity significantly impacts the causes of port congestion and the movement of vehicles and vehicle components.

2.3.6 Insufficient management of port gate operation and access

The congestion issues have caused most ports, particularly the port of Durban, to experience an efficiency decline and severe air pollution (Pruyn et al. 2020). Chen et al. (2013) argue that port gate congestion is becoming a common issue for major world ports, where long truck queues reduce the port system's efficiency, increase traffic accidents, and worsen environmental issues. In the literature, almost all studies have related these long truck queues at and around seaport gates for three reasons. The first is the lack of sufficient handling capacities offered by most seaport gates, especially with the increase in cargo traffic at these seaports (Manaadiar 2020; Zheng & Luo, 2021). The second reason, as argued by studies by Islam et al. (2013), Motono et al. (2014) and Misra (2021), is that some truck and trailer drivers come to port gates with incomplete or incorrect documents but still enter the gate queue to maintain their turn; they cause an increase in traffic flow and waste more gate time. Oruwari (2021) claims that congestion situations at port accesses and gates might occur because of the inefficient operation of port gates, which is caused by the lack of coordination and information exchange between port operators and the respective OEMs. Therefore, the following proposition is proposed for this study:

Proposition 6: The port gate management services system has a significant impact on trucks at the terminal port operators, shippers, truck companies, and the other integrators of the port community.

The following section discusses the theoretical framework, and the conceptual model proposed for this study.

2.3.7 Theoretical framework: Queuing Theory

Queuing Theory is the mathematics of waiting lines, and it was first coined by Erlang in 1909, when he formalised a method for understanding operations research, manufacturing, and systems analysis. Applying this theory is extremely useful in predicting and evaluating system performance (Britt et al., 2014; Nosek & Wilson, 2001). Subsequently, Queuing Theory has many applications and has been widely used by the service industries. Queuing Theory has been used to assess staff schedules, working

environment, productivity, customer waiting time, and customer waiting environment. While some studies have applied Queuing Theory to minimise the waiting cost in the queuing system, a study by Wen et al. (2024) applied Queuing Theory to calculate the uncertain queuing times at port. This study will apply the Queuing Theory for the following reasons: first, it will help to understand the demand and service patterns, allowing for better allocation of resources such as docks, cranes, and labour (Wen et al., 2024). This optimisation can reduce idle times and improve the overall efficiency of port operations (Wang et al., 2023). Queuing Theory can predict congestion and potential delays (Garbotov & Georgiev, 2022; Wen et al., 2024).

Furthermore, the predictive capability of applying Queuing Theory can assist in planning and implementing measures to mitigate congestion before it becomes problematic. Applying Queuing Theory can also identify bottlenecks and suggest improvements in the handling process. By addressing these bottlenecks, ports can increase their throughput, handling more ships and cargo in a given time frame (Nosek & Wilson, 2001). Efficient port operations resulting from effective queuing management lead to faster ship turnaround times, enhancing customer satisfaction for shipping companies and other stakeholders who rely on timely port services.

2.3.8 Conceptual framework

Based on the Queuing Theory discussed in Section 2.3.7, Figure 1 (see also Appendix G) proposes a model that will adopt a streamlined approach to managing port congestion through a formalised queuing process. Figure 2, which is the Port Framework proposed by Belcore et al. (2023) (see also Appendix H), can assist in understanding how better scheduling and communication within ports can improve berth allocations. By combining the Port Framework with the proposed model for this study, an in-depth understanding of how operational efficiency can be enhanced through assisting port operators with tracking arrivals, scheduling shipments, and providing real-time vessel updates. There is also an opportunity to gather insights into how traffic control within ports can optimise berth times and manage vehicle flow effectively. Subsequently, applying Belcore et al.'s (2023) Port Framework and the proposed model can improve communication amongst stakeholders, which is crucial for managing port congestion and mitigating delays.

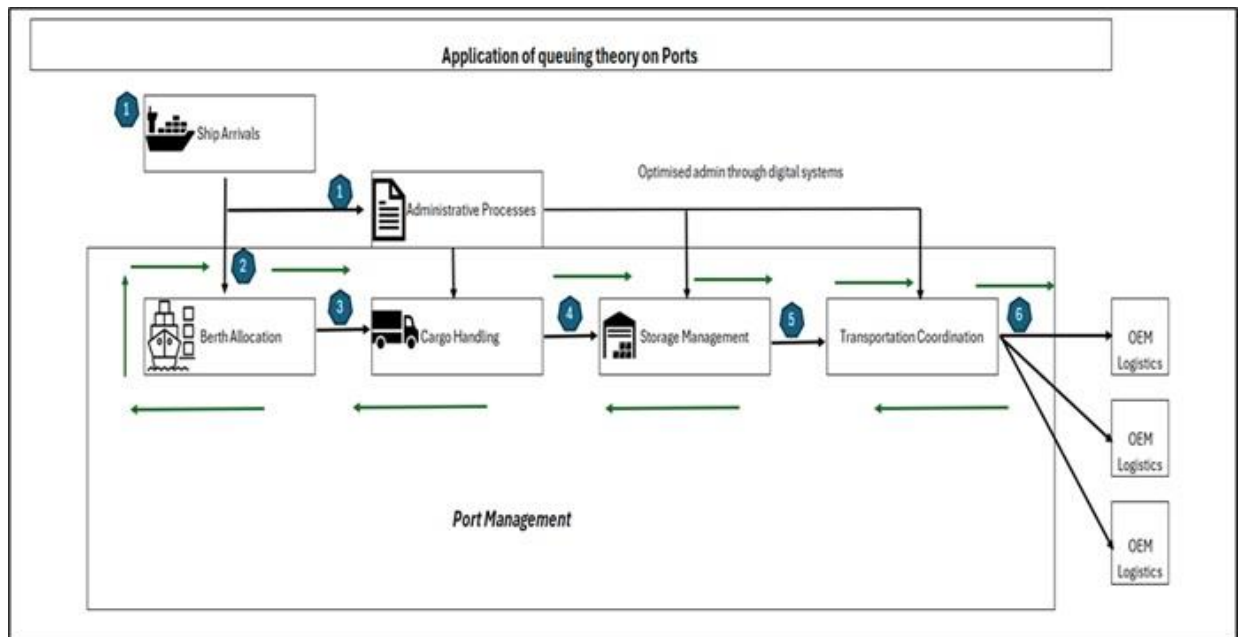


Figure 1: Proposed model of queuing theory on port management

Source: Author's conceptualisation

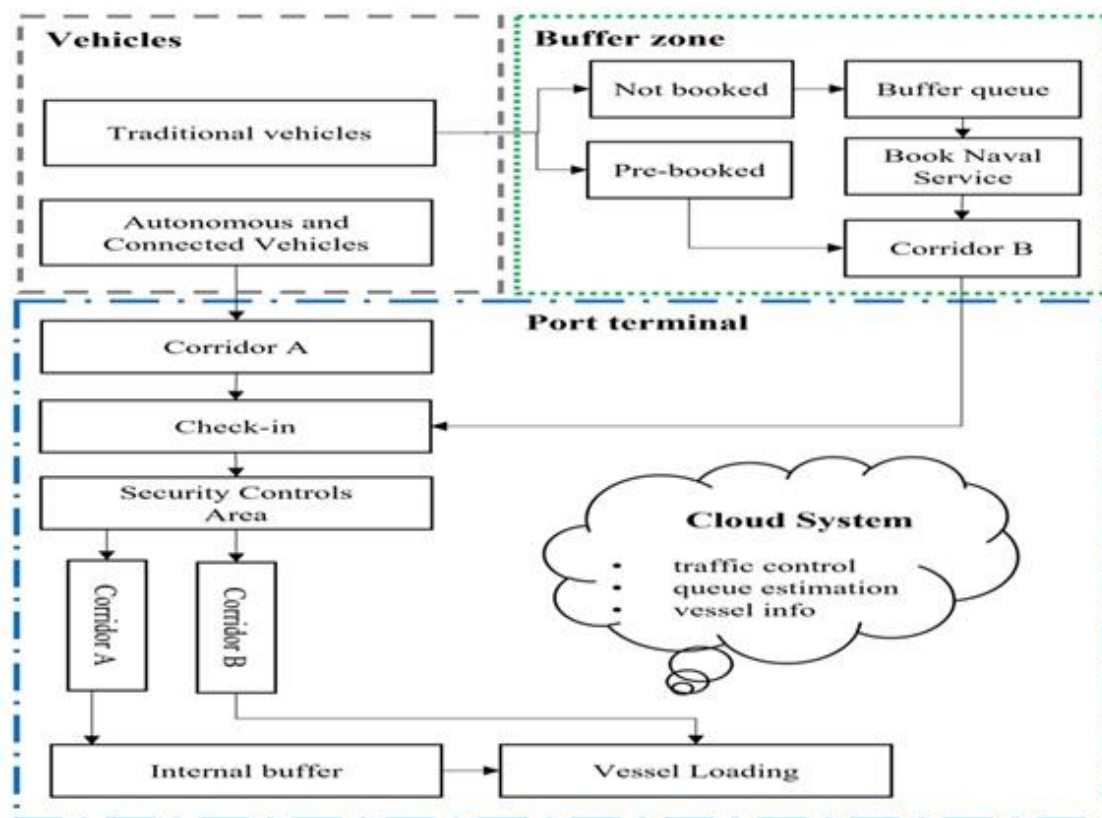


Figure 2: Port Framework

Source: Belcore et al. (2023)

The framework in Figure 2 illustrates the process of vehicles loading at the port. Through communication, the cloud system provides the port managers with information on port congestion conditions in the corridor, terminal buffer area and service operations status.

2.4 Conclusion of Literature Review

This chapter started with a background on the port congestion problem, extracted the definitions of the port congestion problem from the literature, and elaborated on the consensus amongst scholars on defining the phenomenon. It was highlighted through the literature review that the importance of supply chains, berth capacity, inefficient infrastructure, and supply chain disruptions are contributing factors to port congestion challenges. Given the highlighted challenges, this study will examine possible solutions to address this.

CHAPTER 3: RESEARCH METHODOLOGY

This chapter outlines the methodology for collecting and analysing port congestion research study data. As this study was set in the automotive industry, with a specific focus on ports in relation to BMW South Africa and the Durban Port Terminal, the research methodology was qualitative and involved collecting data from individuals based at BMW South Africa.

Richards and Morse (2007) define methodology as a consistent approach to making, interpreting, analysing, and judging theoretical outcomes. The selection of research methodology depends on the researcher's ontological and epistemological perspective, the problem being addressed, study aims, available data, and time constraints (Creswell, 2003).

3.1 Research approach

The research was qualitative and used a case study approach for OEMs to seek a better understanding of challenges faced by the South African automotive industry. A case study approach allowed the researcher to gain an in-depth understanding of the challenges faced by BMW South Africa, from the export and import of vehicles at the port of Durban to the final sale. The research adopted an inductive approach, as it sought to gain a better understanding of port congestion challenges faced by the automotive

industry in South Africa, its effect on vehicle delivery delays to end-customers and what effects it has on OEMs' vehicle sales or financial well-being.

3.2 Research design

With a qualitative research strategy, the research design links the conceptual problem to empirical research (Churchill & Iacobucci, 2002). This study, centred on the automotive industry and the Durban Port Terminal, aimed to describe port congestion challenges and investigate the relationship between their causes to uncover common underlying reasons (Churchill & Iacobucci, 2002).

3.3. Data collection methods

In this study, both a systematic literature review and face-to-face interviews were conducted. The first method was useful in building up the theoretical framework for the port congestion problem. The second method for collecting data was to test and find the common factors amongst the variables that cause the port congestion problem and what adverse effect it has on the automotive industry.

3.4 Population and sample

This section provides information regarding the selected population for this study and the sampling methods.

3.4.1 Population

Bryman and Bell (2011) define the target population as the universe from which a sample is selected, while Collis and Hussey (2014) describe it as individuals or items relevant to the study's purpose. For this research on port congestion causes, the target population included experienced teams from the Durban Port Terminal in operations (three participants), the vessel scheduling team (three participants), the BMW sales team, distribution, and logistics (nine participants). Engaging these stakeholders using individual in-depth interviews provided insights into sales volumes, vehicle imports and exports, and the impact of port congestion on overall vehicle sales to end customers.

3.4.2 Sample and sampling method.

The type of analysis undertaken usually determines the sample's calculation, the required certainty level, the available population size, and a reasonable margin of error

(Saunders et al., 2012). The study gathered information from experienced port operators and sales managers from BMW SA, and face-to-face interviews were conducted. The researcher's primary goal was to gather at least 15 participants to represent the total population for this study; each participant interviewed had specific skills and knowledge of the port congestion's impact on the automotive industry. The total number of participants for the study was 15 professionals in management positions. Table 2 shows the sample frame for this study.

Table 2: Sample frame

Target description	No. of participants
Port Director: Overseeing overall port operations and management. Ensuring compliance with regulations and safety standards	1
Operations Manager: Managing day-to-day operations of the port. Scheduling and coordinating ship arrivals and departures. Supervising cargo handling, storage, and transportation activities	2
Port Terminal Managers Overseeing the safe and efficient movement of vessels within the port. Managing berthing and docking assignments. Monitoring weather conditions and issuing navigational warning	2
Logistics Manager: Managing the flow of goods and materials in and out of the port. Coordinating with shipping companies, customs, and transportation providers. Ensuring efficient handling, storage, and distribution of cargo	2

Finance Manager (OEM & Port) Managing the financial operations of the port and OEM. Preparing budgets, financial reports, and forecasts. Monitoring revenue and expenditure.	2
Fleet Managers (OEM) Responsible for managing relationships with OEM and dealerships, including shipping companies and cargo owners. Responsible for addressing customer inquiries, complaints, and feedback.	2
Distribution / Sales Manager Overseeing the sale of vehicles, stock availability, stock forecast Responsible for making vehicles available to Dealers, Government sale, Corporate sales and used car market	4

Source: Author's conceptualisation

3.5 The research instruments

The research instruments for the study were face-to-face interviews and Microsoft Teams. Interviews were conducted during the week / working hours, and the interview schedule ran from 9 am to 3 pm.

3.6 Procedure for data collection

Research was conducted through structured and unstructured interviews. The interviews were conducted face-to-face at the port of Durban and the BMW Vehicle Distribution Centre, and the interviews took approximately 45 minutes with each participant. The interview did not exceed an hour, as this would have compromised the validity of the research.

First, the researcher contacted respondents a week prior to interviewing them or prior to conducting individual in-depth interviews to inform them about the research being conducted. At this stage, the researcher gained informed consent from respondents and booked interview appointments.

A formal script was developed to guide the interview and individual in-depth interview process, with open-ended questions. Open-ended questions allowed the respondent to offer any additional information relevant to the study. During the interview discussions, the respondents were asked to provide a background about who they were. This helped to build the rapport and trust between the researcher and the respondent. The interview questions were arranged to obtain general and more specific strategic information. Questions that were not clear to the researcher were probed to gain a better understanding (Naudé, 2016).

3.7 Data analysis strategies and interpretation

Data from interviews was analysed through thematic analysis, ensuring systematic examination to address research questions effectively (Thomas & Harden, 2007). Nasir and Saghatchian (2021) outline steps for data analysis, including transcript review, coding, and categorisation based on key themes. This study used thematic analysis to interpret collected data (Thomas & Harden, 2007).

3.8 Possible limitations and challenges of the study

The study focused on understanding the impact of port congestion on the automotive industry and identifying ways to minimise delays in vehicle delivery to customers. However, it did not address other challenges in the motor industry's competitive edge in vehicle manufacturing. The research was specific to the port of Durban, where BMW handles vehicle loading and offloading, excluding other ports like East London, Port Elizabeth, or Cape Town.

3.9 Validity, credibility, quality assurance and reliability issues

Reliability was upheld by meticulous study process reporting (Saunders et al., 2012; Shenton, 2004). Interviews involved qualified respondents to ensure data accuracy and confidentiality (Shenton, 2004). Carefully structured interviews, either face-to-face or online, prevented ambiguity (Saunders et al., 2019; Shenton, 2004). Validity was assured by understanding organisational culture and consulting relevant documents (Leedy & Ormrod, 2010; Shenton, 2004). Thematic data analysis-maintained validity through multiple methods, participant feedback, and precise coding (Shenton, 2004; Nasir & Saghatchian, 2021). Diverse data sources enhanced credibility and reliability (Tracy, 2010; Saunders et al., 2019). Pre-testing and pilot studies refined questionnaires for

clarity and accuracy (Saunders et al., 2019). The validity and reliability of data depended on the data conveying a certain amount of meaning rather than the exact words, even though the researcher used frequency analysis to analyse the common words used by the participants in the interview. Hsieh and Shannon (2005) state that word frequency is unimportant: latent content analysis, which is the analysis of the data and the provision of interpretation, is essential. Data compromising this meaning helps to systemise the semi-structured interviews and assists the researcher in comparing the data (Barriball & While, 1994).

Singh et al. (2021:1292) note that qualitative methods must address credibility, transferability, dependability and confirmability. Credibility refers to the extent to which the findings are believable or plausible, while transferability is the degree of similarity between two contexts (Guba, 1981). Dependability entails the steps taken to enhance the consistency of methods and processes in data collection and analysis (Singh et al., 2021). Confirmability refers to the objectivity criterion used in quantitative studies (Shenton, 2004). The steps shown in Table 3 were taken to ensure that this study meets the trustworthiness criteria.

Table 3: Trustworthiness of the study

<i>Credibility</i>	All data collected was voice-recorded and transcribed verbatim. A description of the study's rationale and background was provided to all participants.
<i>Transferability</i>	Provided a detailed background description of the participants selected for this study.
<i>Dependability</i>	All data collected for this study was dated and recorded meticulously, with all evidence saved on cloud storage and the voice recorder.
<i>Confirmability</i>	The interviewer only used the questions provided in the interview guide (Appendix B) during all interviews to ensure that the researcher forms no bias or subjective opinions.

Source: Author's conceptualisation

This quality contribution was derived from Gough et al. (2012), who state that the traditional peer review provides external quality assurance from highly experienced academic people with the same interest in the research topic. In other words, additional quality checks were conducted with peers who understand the port operation and vehicle manufacturing industry to analyse and verify the quality of the work.

3.10 Ethical considerations

Ethical considerations are paramount in social research (Collis & Hussey, 2003). The study prioritised participant rights, including informed consent, confidentiality, and the option to withdraw without explanation (Burns, 2000; Christians, 2000; Payne & Payne, 2004). Before data collection, ethical approval (Appendix D) and participant consent (Appendix F) was obtained, and participants were provided with necessary documents ensuring confidentiality and voluntary participation (Burns, 2000; Christians, 2000; Payne & Payne, 2004).

The ethical considerations form was submitted, and a certificate was provided (Appendix D). Approval and signoffs were obtained before data collection. A consent form (Appendix E), non-disclosure agreement and respondent information sheet (Appendix F) were available for all the participants who were interviewed, such as adding 'requesting response' flow logic for some questions and adding the statement 'prefer not to say' to the questions. The participant information sheet was available to guarantee anonymity. Participation was voluntary and withdrawal permissible at any given time.

In addition, BMW South Africa provided permission for the study to be conducted on their premises (Appendix I), and Portnet provided permission for data collection on their premises (Appendix J).

CHAPTER 4: FINDINGS AND RESULTS

4.1 Introduction

This chapter presents the research results following the research questions from Chapter two. As the foundation for the study was an exploratory study, understanding the causes of port congestion in the port of Durban was essential to offer solutions to the congestion challenges faced at the port of Durban by the automotive industry. To understand how congestion is experienced at the seaside and landside, semi-structured interviews with 15 experienced industry participants who were experts in the fields of port operation and

in the automotive industry, were conducted. As the study was inductive, a thematic analysis was conducted to establish the key themes from the data collected through the semi-structured interviews.

In this chapter, a presentation of the summary of the participants' feedback are presented through themes. This includes quotations from the participants, as they add to the body of knowledge on the research. The results of the interviews were gathered in accordance with the research questions from the literature review. This entailed research into understanding why the port of Durban remains congested, and challenges facing the automotive industry because of the congestion; and finally, what solutions exist that the port of Durban could employ to minimise the congestion. The results are presented under each of the questions that were asked during the interviews. The following section describes the sample that was interviewed for this study.

4.2 Participants

The sample comprised fifteen participants who were individuals in organisations related to the value chain within the automotive sector and were affected by port congestion. Their seniority within their organisations indicated their extensive experience, as they hold senior management titles. The participants included individuals in the recently formed decongestion task team (Operations and Scheduling) for the port of Durban. All the research participants (see Table 4) identified themselves and explained their experience of port congestion, which aligned with the primary constructs of the study.

Table 4: Participants

Participant#	Gender	Position in organisation	Organisation Type	Years of experience	Level of Education
A	Male	Port Director	Transnet	20<	Postgraduate
B	Male	Operations Manager	Transnet	15>	Postgraduate
C	Male	Port Terminal Managers	Transnet	15>	Postgraduate
D	Female	Logistics Manager	BMW South Africa OEM	10<	Postgraduate
E	Female	Finance Manager (OEM & Port)	BMW South Africa OEM	15>	Postgraduate
F	Female	Fleet Managers (OEM)	BMW South Africa OEM	15<	Postgraduate
G	Female	Distribution / Sales Manager	BMW South Africa OEM	20<	Postgraduate
H	Male	Used car sales	BMW South Africa OEM	25<	Postgraduate
I	Male	Car Carrier Operations Manager	To Anywhere Carrier	30>	Postgraduate
J	Male	Transnet Shift Operations Manager	Transnet Port Terminal	15>	Postgraduate
K	Female	Distribution / Sales forecasting manager	BMW South Africa OEM	10<	Postgraduate

Source : Author's conceptualisation

Table 4 indicates that most participants were male, with only five participants being female. All participants hold postgraduate qualifications. All participants held senior management positions with more than ten years' work experience and are therefore decision-makers in their organisations.

The participants occupied positions in senior management; the reason for purposely choosing these participants is that they can make or influence decisions in an organisation, thus having the ability to affect how the respective employers behave towards port congestion. The sample consisted of participants from BMW South Africa (automotive sector), To Anywhere Carriers (TAC car carriers), and Transnet Port Terminal (TPT), who provided insight into how their operations are affected by port congestion. The participants provided further insight into the daily battles and struggles that they are experiencing within the port, including incompetent staff managing processes, volume capacity, and inefficient port operators. The participants interviewed had knowledge of and had experienced port congestion in their organisations.

4.3 Key themes from the data collection

This section summarises the participants' feedback through themes and includes verbatim quotations from the participants (Table 5), as they add to the body of knowledge on Chapter two's research questions. The research entailed understanding why the port of Durban remains congested; what challenges faced by the automotive industry are still being experienced; what was implemented in other ports around the world to ease congestion, and finally, what solutions exist that the port of Durban could implement. The results are presented under each theme that was developed for the interview guide.

In this chapter, a compilation of the participants' interviews and themes is linked to the literature review discussed in Chapter two, which aligns with the theory and adds to the Queuing Theory on ports management. The primary research question seeks to understand what the participants perceived as the causes of Durban's port congestion.

Table 5: Participants' interviews

Theme	Description	Supporting Quotes by Participants	Sub-Codes
Port Infrastructure and Capacity	Insufficient infrastructure to handle the growing volume of cargo and transport methods, particularly rail.	"We don't have enough infrastructure" (Participant J)	Capacity strain, transport inadequacies, space limitations
Inefficiency and Delays	Manual processes, faulty systems, and external issues like cable theft and traffic congestion cause delays.	"There's a lack of efficiency in clearing goods" (Participant H)	Manual processes, operational bottlenecks, cable theft, systemic delays
External Factors (Natural Disasters, Rail Issues)	Natural disasters, theft, and inconsistent rail services cause shipment delays, affecting the ability to meet deadlines.	"Natural disasters like Hurricane Katrina" (Participant E); "The rail is not reliable due to theft" (Participant J)	Natural disaster risks, rail infrastructure issues, unpredictable delays
Strategies for Improvement	Interviewees proposed digital solutions, infrastructure development, and better distribution across ports as improvements.	"Digital interventions could streamline processes" (Participant G)	Technology enhancements, port diversification, streamlining processes
Competitiveness and Economic Impact	Delays and inefficiencies impact OEM competitiveness, financial performance, and customer satisfaction.	"Customers cancel orders due to delays" (Participant F); "Delays cost OEMs money in lost sales" (Participant G)	Financial loss, reputation damage, sales impact, lost competitiveness
Human Resource Limitations	Lack of skilled manpower and human error contribute to	"We don't have enough people for these operations"	Workforce limitations, human

	inefficiencies and delays.	(Participant G); "Errors happen when there is too much human intervention" (Participant E)	error, skilled labour shortage
Impact on Export vs Import	Prioritising export operations over imports is important as exports are economically more significant.	"Exports are where the real money is made" (Participant J); "We must prioritise export shipments" (Participant J)	Export prioritisation, revenue generation, import delays
Proposed Solutions and Best Practices	Solutions include separating import/export processes, improving forecasting, and better planning for peak seasons.	"If imports and exports were separated, it would reduce congestion" (Participant J); "We need to anticipate and plan better" (Participant E)	Risk mitigation, forecasting, operational segregation
Digitalisation and Technological Interventions	Technology can improve operations, but current systems are too dependent on human input, leading to errors.	"Digital systems still require human intervention" (Participant E); "We need real-time tracking of shipments" (Participant E)	Real-time tracking systems, automation, data transparency
Seasonality and Weather Impact	Seasonal changes and adverse weather conditions disrupt operations, affecting port efficiency.	"Seasonal weather disrupts supply chains" (Participant A); "We need better preparation for weather-related disruptions" (Participant C)	Weather-related disruptions, lack of seasonal preparation, weather forecasting
Risk Management and Forecasting	Better risk management strategies are needed	"We need to anticipate risks better" (Participant E);	Risk anticipation, proactive risk

	to anticipate and mitigate internal and external disruptions.	"Forecasting and planning are critical to mitigating delays" (Participant E)	management, forecasting systems
Communication and Coordination Issues	Lack of communication and coordination between stakeholders creates inefficiencies across the supply chain.	"We need transparent communication across departments" (Participant B); "Better communication would reduce delays" (Participant E)	Inter-departmental communication, stakeholder alignment, information transparency

Source: Author's conceptualisation

The following section discusses the research findings, linking them with the study's propositions and supporting them with literature review insights and the theoretical model.

4.3.1. Port Infrastructure

Research question 1: How does the quality of port infrastructure, particularly the inadequacy of rail systems in South African ports, influence port congestion?

The main objective posed to participants was to understand how the quality of port infrastructure, particularly the inadequacy of the rail system in South African ports, influences port congestion (Table 6). This study aimed to explore how port infrastructure influences congestion. Section 2.3.1 reviewed the literature on inefficient port infrastructure, highlighting the need for enhanced capacity to meet rising demands and reduce congestion. Wang and Wang (2019) suggest that infrastructure improvements are crucial to handle increased port usage effectively. Proposition one asserts that infrastructural inefficiencies significantly exacerbate port congestion, adversely affecting delivery times in the South African automotive industry. Interviews with selected participants sought insights into the current state and challenges of South Africa's port infrastructure network. Participants discussed the condition of the infrastructure and its impact on port congestion, providing the following key points:

Table 6: Port infrastructure

Interview question: Port infrastructure
PI1. How would you describe the current state of port infrastructure systems in South African ports? (Probe: current issues with other infrastructure like road and rail)
PI2. How does the quality of port infrastructure contribute to or worsen port congestion issues? (Probe: impact on performance, market conditions)
Quotes by participants
<i>Participant F: "It's more likely there's an element of lack of maintenance on port, and certain delays can have a negative impact on sales volumes and from import and export perspective."</i>
<i>Participant A: "It is not up to par, because of all the delays that we as a company have been experiencing, so we think that if the government can intervene in the infrastructure that it's not up to the level, the Durban port infrastructure is inadequate at the moment."</i>
<i>Participant D: "There is a demand to process a lot more units, but the Durban port doesn't have the capacity, so I will say, it's of like moderate."</i>
<i>Participant C: "Like based on my little research that I made also. Would be the road and rail port infrastructure that is not in good condition"</i>
<i>Participant E: "Oh, I think if we had better road infrastructures in South Africa that would lessen the dependence on the port, for sure. Not everything will have to then be coming on the by water then we can, if we have reliable, I think maybe we also have railway systems, but obviously in South Africa they aren't as advanced as the UK, Europe and all of those. So it's nothing in comparison".</i>

Source: Author's conceptualisation

Based on Table 6, it is evident that participants interviewed during data collection have highlighted that South African port infrastructure is not at the level that it should be. Studies by Nze and Onyemечи (2018) and Gidado (2015) affirm that port congestion in Africa, especially in South Africa, recurs seasonally because of inadequate planning, equipment, and infrastructure. Based on the points made by some participants, the literature supports the findings on poor port infrastructure within this study. Additionally, the Queuing Theory grounds this study, highlighting that allowing for better allocation of resources such as docks, cranes, and labour (Wen et al., 2024) can reduce idle times and improve the overall efficiency of port operations (Wang et al., 2023). However, based on the research findings, South African ports still lack good infrastructure, and it remains challenging for port operators to manage them. Therefore, decision-makers face

challenges in developing infrastructure to meet rising demands effectively (Wang & Wang, 2019; Humphreys et al., 2019; Mchunu, 2021; Islam & Olsen, 2022).

Apart from the poor infrastructure highlighted in the interviews, another theme emerged from the interviews, which highlighted an inefficiency caused by manual processes. Delays are exacerbated by manual interventions that require human input, resulting in errors and longer wait times. This is further complicated by cable theft, especially affecting the rail systems.

The research problem in the proposal also discusses how inefficient port operations contribute to congestion, echoing the findings from the interviews that manual processes are not optimised for the volume of cargo being handled.

- **Relevant Quotes:** *"There's a lack of efficiency in clearing goods"* (Participant H); *"Cable theft leads to operational delays"* (Participant F).

This aligns with the study's objective, which seeks to explore how inefficient operations affect the industry and what strategies can be implemented to improve productivity and mitigate delays.

4.3.2. Port Strategies

Research question 2: What strategies can enhance operational productivity competitiveness and mitigate congestion in these ports?

Ports are essential for fostering collaborative relationships with traditional partners, including shipping companies, terminal operators, and automotive firms (Hoa & Haasis, 2017). Strategies involving equipment such as quay cranes, forklifts, and tugboats are crucial for efficient operations and congestion reduction (Eddrgash, 2022). To understand how port congestion affects the automotive industry, it was essential to study and explore how port strategies influence congestion and examine proposition two, which suggests that prolonged dwell times significantly hinder port efficiency.

For this study, port congestion can negatively affect the movement of vehicles. Furthermore, Eddrgash (2022) contends that ports play critical roles at the intersection of multiple independent supply chains and have an enormous potential to improve supply chain competitiveness; thus, congestion at ports may negatively impact the economy if not managed correctly. Additionally, Davies and Kieran (2015) posit that the most visible consequences of congestion are increased truck turnaround (or service) times in ports. They argue that congestion also generates significant uncertainty for vehicle

manufacturers, as it affects the sale of vehicles, or it may potentially affect the end user. One of the risks of port congestion for OEMs, highlighted by Gidado (2015), is the increase in accidents that may arise on the roads by car carriers to deliver the vehicles urgently to end customers or dealerships (see Section 2.2).

Table 7: Port strategies

Interview question: Port strategies
PS1. What strategies or measures can be applied to improve operational productivity and competitiveness in ports and, in so doing, mitigate congestion? (Probe: competitor strategies, digital interventions, current processes)
PS2. Are there any specific initiatives or best practices that you believe have been effective in addressing port congestion challenges? (Probe: digitalisation of processes, streamlining operations)
Quotes by participants
<i>Participant G: What they need to have a way of extending the workplace, their workplace, because now they're working in a in a very small place, weights easily congested</i>
<i>Participant A: OK, I'll think when I've mentioned the government playing a role, it also alleviates some of these congestions that we talk about because from the infrastructure we're using rail, we're using Rd transport. So or if that can be intervened with the Minister of our road and trust and traffic department, then we can be able to sort those issues out, which they can</i>
<i>Participant B: To grow bigger, get more infrastructure, get more employees, get more people on the hands working at the port, ensuring that the cars are transported</i>
<i>Participant C: Cut it at like at least to put yourself to say this will this will all. This is all that will be able to do on this day and then you don't take on more to avoid having people wait for too long</i>
<i>Participant D: So I think an integrated portrait strategy. It's very, very much important so that you can increase efficiencies within the port. So, you have to understand that the port that is impeding on the capacity issues. So a strategy where you have an integrated Operation and planning between port the inland port as well as the rail would go a long way in terms of enabling efficiencies within the port because you've got at the end of the day, you've got a limited space that you can, you know, from an automotive side where you can actually park the cars. So you need the port to move from just a, you know, a parking, but to a more of a throughput wave you limiting the number of days that you're giving clients.</i>

Source: Author's conceptualisation

4.3.3. Port Operations

Research question 3: How do port operators balance the demand and supply aspects of gate services to mitigate congestion at port accesses and gates?

Rail system failures in South Africa exacerbate pressure on road transportation, contributing to congestion (Okpomo, 2021). Dragović et al. (2006) state that port expansion or development must be considered in the light of port objectives, according to the national or regional point of view for economical transport. However, in Africa, particularly in South Africa, the failure of its rail system has caused more pressure on road transportation in moving vehicles from and to ports, eventually leading to congestion of the port gates and port accesses (Okpomo 2021). The lack of sufficient handling capacities offered by most seaport gates, especially with the increase in cargo traffic at these seaports, led to the second reason, which was argued by studies of Islam et al. (2013), Motono et al. (2014) and Misra (2021), is that some truck and trailer drivers come to port gates with incomplete or incorrect documents but still enter the gate queue to maintain their turn, and they cause an increase in traffic flow and waste more gate time.

Ports have evolved from cargo storage hubs to essential components of distribution and processing networks. In South Africa, where infrastructure challenges persist, efficient port operations are crucial for maintaining smooth supply chains. Modern ports, with their focus on cooperation and technology-driven information sharing, help mitigate the impacts of congestion, such as increased shipping costs from delays in labour, fuel, and scheduling (Guan, 2009). Proposition 3 suggests that supply chain readiness significantly impacts the causes of port congestion and the movement of vehicles and components. Interviews with selected participants sought insights into the current state and challenges of South Africa's port operations. Participants discussed the condition of the infrastructure and its impact on port congestion, providing the following key points:

Table 8: Port operations

Interview question: Port operations
PI1. Can you describe how port operators manage the balance between demand and supply aspects of gate services to ease congestion at port accesses and gates? (Probe: impact to stakeholders and business partners)
PI2. What challenges do port operators typically face in this regard, and how do they go about overcoming them? (Probe: current measures in place, what digital interventions have been implemented so far)
Quotes by participants
<i>Participant F: “ We rely on additional resources to help move the vehicles and had to rely on moving the vehicles by rail and by road, however rail has certain inefficiencies such as cable theft etc.”</i> <i>Participant A: “Maybe in the operational structure, Port operators can have monthly meetings to talk about all these congestions, then maybe they can see where they are and then try to resolve those issues, however with the demand and supply , it just moves swiftly”.</i> <i>Participant D: ““The integrated planning perspective that is lacking and even port operations depend on the infrastructure configuration.”</i> <i>Participant C: “Port operators need to know weather forecast in their sleep as that plays a very vital role within the port, with the floods that had been happening in KZN , obviously things or vehicles not being able to move.”</i> <i>Participant E: “Port operators might be meeting the demand and the supply, although there could be a better delivery, if they work on improving the delivery therefore , the demand will be better.”</i>

Source: Author’s conceptualisation

Based on Table 8, it is evident that participants interviewed during data collection have highlighted that in South African ports, especially the Durban Port Terminal, communication issues need to be addressed amongst the multiple stakeholders. Participants frequently mentioned that the lack of communication and coordination amongst various stakeholders, including port operators, OEMs, and transport companies, is a critical issue. Misaligned priorities and poor information sharing further contribute to congestion at the port gates. Container-Xchange (2022) further suggest that port managers should effectively manage berth allocation strategies, as this can help to reduce the vessels’ waiting time at congested ports or container terminals. Port

managers must reduce congestion problems at their ports by balancing the cost of ships' waiting time and the economical use of their allocated resources (Dragović et al., 2006).

- **Relevant Quotes:** *"We need transparent communication across departments"*
(Participant B)

4.3.4. Competitiveness

Research question 6: How does port congestion impact an OEMs competitiveness when vehicles are jammed at port due to port congestion?

Ports play a vital role in global supply chains, but inefficiencies caused by disruptions, poor facility management, and labour shortages significantly impact congestion, as highlighted in Propositions four and six. Supply chain disruptions, including unmet demand, lead to lost sales for vehicle manufacturers and customer switching, while limited skilled labour and reliance on manual processes exacerbate delays. Digital solutions, such as real-time tracking and automated systems, can streamline operations and reduce bottlenecks. Additionally, prioritising exports, addressing environmental factors like power outages and weather disruptions, and fostering a motivated, well-trained workforce are crucial to improving operational productivity and competitiveness. Improved gate management systems and better coordination amongst stakeholders can further optimise vehicle and cargo movement, aligning with the study's findings. Ports must enhance operational productivity and manage facilities more efficiently to mitigate congestion and increase competitiveness (Nikghadam et al., 2021). As ports are vital nodes in global supply chains, the range of potential port-related risks affecting the entire supply chain will expand because of complex operations and interactions with other players (Loh & Thai, 2014).

Proposition one asserts that inefficient berth capacity significantly impacts the causes of port congestion and the movement of vehicles and vehicle components, which causes vehicle manufacturers to lose sales to competitors due to lost sales or customers to switch to other brands due to demand not being met are some of the key factors that negatively affect the automotive industry.

Table 9: Competitiveness

Interview question: Competitiveness
C1. What are the primary impacts of port congestion on OEMs (Original Equipment Manufacturers)? (Probe: Do OEMs lose out on customer sales, do vehicles end up in bond for longer periods due to delays at port)
C3. How do OEMs typically respond or adapt to mitigate the negative effects of port congestion on their operations and competitiveness? (Probe: pricing, relationship with customers – cooperative or arm's length)
Quotes by participants
<i>Participant E : “The people that are obviously in the position of making those strategic decisions and improvement and so forth. So my feedback is more in line with what those people bring to the party because they are the ones that the wine makers and they bring their strategies. So better focusing I suppose”.</i> <i>Participant C: “One it hits them on sales, you know, because obviously we may like you may come like you have your clients that you and you also want to meet expectations from your from a client's perspective. So they like if there's any delays that go on at the port.”</i> <i>Participant B: “Automotive industries. So, with that loss of sales that then affects the whole everything that I kind of spoke to you in terms of our targets for the man effects, our working structure because now we have to stay up late trying to catch up and get work done trying to find replacement units. So instead of me now doing my day-to-day work, I'm sitting here hunting for cars”.</i> <i>Participant G : “BMW South Africa. They have a specific number of cars that are manufactured within 24 hours, and they do not have enough space to store car. So by any two or three days delay it means now the yard will be overpaid with cars”</i> <i>Participant F: “Once again, my opinion not talking on behalf of anybody, my opinion is that a country like South Africa cannot rely too heavily on one specific port. You need to build in at the four options.”</i> <i>Participant D: “That's where the competitiveness is going to come from. Making models in terms of the demand for it so that you can plan sufficiently. And because we have these inefficiencies, the model has to take into account the inefficiencies within that. That's how you're going to remain competitive because we cannot just say that, OK, these the other aspect of components now of. “</i>

Source: Author's conceptualisation

Based on Table 9, it is evident that participants from the automotive industry interviewed during data collection have highlighted that the Durban Port Terminal congestion challenges have a huge bearing on the economic impact of the competitiveness of OEMs is a recurrent theme across interviews. The interviews' findings demonstrate frustration over lost sales and customer dissatisfaction because of delayed deliveries. This directly affects market performance, as OEMs cannot meet their sales targets and frequently lose customers to competitors because of unmet demand. Decision-makers face challenges in developing infrastructure to meet rising demands effectively (Wang & Wang, 2019; Humphreys et al., 2019; Mchunu, 2021; Islam & Olsen, 2022). Wang and Wang (2019) argue that improving and developing the port infrastructures requires port capacities that can cope with the increased demand on its resources to minimise congestion situations.

The research questions specifically ask about the impact of congestion on OEM competitiveness, reflecting concerns about how delayed shipments erode market share and harm the financial well-being of the automotive industry.

- **Relevant Quotes:** *"Customers cancel orders due to delays"* (Participant F); *"Delays cost OEMs money in terms of lost sales"* (Participant G).

4.3.5. External factors causing port congestion

Research question 5: How do weather conditions, seasonality, and unexpected events affect congestion levels at port gates, and how can they be effectively managed?

From the literature review, Gidado (2015) declared that weather conditions are one of the causes of port congestion that has a negative impact on port operations not functioning smoothly. Through interviews with participants, they have confirmed that wind has been ranked as the main cause of port congestion in the port of Durban from the landside perspective rather than the seaside, as mentioned by Gidado (2015). There is limited literature on weather conditions and ports, with research focusing on seaside operations and the impact of climate change. Rosario (2020) declared that 300 days per annum are the actual working days for the vessel-to-shore gantries, which have been cutting off at wind speeds exceeding 70kph. Rosario (2020) further confirmed what the participants stated regarding the effect of wind and the disruption in cargo operations caused by bad weather. Other effects of port congestion highlighted by Neagoe et al. (2021) and Nze and Onyemechi (2018) include increased inventory, warehousing,

transportation costs, and decreased overall transport performance by vehicle carriers. Proposition 6, which proposes that the port gate management services system has a significant impact on trucks at the terminal port operators, shippers, truck companies, and the other integrators of the port community, however applying Queuing Theory can also identify bottlenecks and suggest improvements in the handling process. By addressing these bottlenecks, ports can increase their throughput, handling more ships and cargo in a given time frame (Nosek & Wilson, 2001). Efficient port operations resulting from effective queuing management lead to faster ship turnaround times, enhancing customer satisfaction for shipping companies and other stakeholders who rely on timely port services.

Table 10: External factors causing port congestion

Interview question: External factors causing port congestion
EF1. How do weather conditions, seasonality, and unexpected events contribute to variations in congestion levels at port gates?
EF2. What strategies or procedures can be implemented to effectively manage these external factors and minimise their impact on port congestion?
Quotes by participants
<i>Participant A: It is always tricky, but I think with the system in place and all the employees who are trained to be working with in such weather conditions to know that, OK, we are expecting maybe this percentage of rain or we are expecting this expected of high levels of. Seasonal change, whether it's summer, whether it's winter, I think getting somebody who's very. I'm skilled in that field, may help to alleviate some of the delays that may happen due to seasonal changes.</i> <i>Participant C : I think like being like being prepared for like the seasons. We obviously know that the weather's like it changes all the time, and there's also seasons, so you know that in rainy seasons this is what like if you're on top of your game and you know what you're doing and you've done it before, then you are better prepared for each season that comes.</i> <i>Participant D : Yes, you cannot you. You need to take that into account. That. OK. I'm predicting that the weather's not going to be good in Durban in December. So OEM BMW must take that into account. That OK, there's going to be a delay. So, if the weather is not going to be good in December, then we're going to let's ship a lot more components that you're using in your production plant in November</i>

Participant G: It's something that it's not. It's unforeseen. And usually if it does, then they do announce it and no one at any point is at fault because if ever maybe I'm going to be honest with you, we do have situation where you'll find the man wrote like.

Source: Author's conceptualisation

Based on Table 10, it is evident that participants from the automotive industry who were interviewed during data collection have highlighted the weather conditions as a critical factor affecting port congestion in Durban from a landside and seaside perspective. Most participants, especially from the Durban Port Terminal, shared a similar view in terms of wind and weather conditions and their impact on the port.

Participant E shared the most important sentiments: the changing weather conditions are certainly unavoidable. However, the approach to recover from this disruption is important. Participant D explained that through a proper planning and recovery process being implemented, the power could lessen the impact of the disruption caused by wind.

Few participants were very concerned about labour and increasing productivity as a 'quick win' to alleviate congestion aligned to participant A response.

4.3.6. Other Factors

Research question 6: How does port congestion impact an OEM's competitiveness when vehicles are jammed at port due to port congestion?

The economic causes that lead to the port congestion problem arising at ports have been indicated in a substantial number of the challenges that hinder the automotive industry and negatively affects their financial well-being. Also, the lack of berths capacity at a port as the cause for port congestion could be related to other detailed reasons such as inefficient ship-to-berth plans or shortage in labour. Chinedum (2018) defines the congestion problem based on its effects on the supply chain as a situation that causes unpleasant consequences on automotive industry logistics systems and the supply chain because of delays and extra time for vessels and cargoes at ports, which usually impose charges on customers.

Table 11: Other factors to consider

Interview question: Other
O1. Can you elaborate on the specific challenges faced by OEMs when vehicles are delayed at port due to congestion? (Probe: core competencies, costs)
O2. How does port congestion ultimately affect an OEM's competitiveness in the automotive market? (Probe: internal relationships with stakeholders)
Quotes by participants
Participant A: "I think our biggest one when we are in in the Fleet Department, in the logistics industry would be. Satisfying our customer, I think."
Participant B: "So our suppliers just need to grow. We need to have a digitised and a proper system in place for us to always be informed and not having to rely on other departments. For information".
Participant C: "I mean one it still like it's an overall negative impact on the industry's competitiveness #2 it's a key, it's increased costs and #3 it's I think we end up also losing customers because we are not meeting them at their point of need, you know because I don't think you just wake up one morning and say I'm going to buy a car, you plan well ahead. So you know like you you're already excited. So if that is not met then it's very disappointing. So we may end up losing.
Participant D: We I think as service providers from a logistics perspective, we need to enable that competitiveness for forms to OK we enabling them, they can be competitive on them. On the other side of the customer you know perspective in terms of what they offer
Participant E: So I feel like together as a different OEMs as much as their competitors, they have common ground somewhere. That is where they need to hold hands. And some Tammy's stand together and oppose. And if there are better systems and better laws to be implemented on the ports

Source: Author's conceptualisation

4.4 Key findings and recommendations for the model

The Queuing Theory can predict congestion and potential delays (Garbotov & Georgiev, 2022; Wen et al., 2024). The Queuing Theory has also been conducted with empirical research studies to study the bottleneck nodes in ports and container terminals. In this paper, Queuing Theory was applied to addressing these bottlenecks and how the theory can be applied to assist the port of Durban to increase their throughput, handling more ships and cargo in a given time frame (Nosek & Wilson, 2001). Efficient port operations resulting from effective queuing management lead to faster ship turnaround times,

enhancing customer satisfaction for shipping companies and other stakeholders who rely on timely port services. Furthermore, the predictive capability of applying Queuing Theory can assist in planning and implementing measures to mitigate congestion before it becomes problematic. Applying Queuing Theory can also identify bottlenecks and suggest improvements in the handling process.

From Chapter two, it can be seen from the literature that Gidado (2015) has defined port congestion with the same conception as a situation that arises from increasing vessel traffic on a port and its berthing facilities cannot handle this increase on vessel traffic. This definition produced by these papers was simply based on the increase in vessel traffic calling on a port through the increase in international trade or improvement in the port country's economy to define port congestion. Onwumere and Egbo (2008) express the port congestion problem as a situation where coming ships need to wait outside the port in a queue to be allocated berth slots for loading or unloading their cargo.

This section responds to the research questions, integrating interviews' findings to explore causes of port congestion and the impact it has on the automotive industry.

The first research question was to examine how the quality of the port infrastructure, particularly the inadequacy of rail systems in South African ports, influence port congestion.

This discussion also explores the challenges and highlights the lack of capacity and outdated facilities, which contributed to significant delays at the Durban port. This aligns with the research problem, which points to insufficient infrastructure capacity and the inability of the ports to keep up with increasing import and export volumes.

From the interview questions posed to the participants and an analysis of the frequency figures above: "port infrastructure and capacity", "lack of efficiency in clearing goods", "unreliable rail due to theft", "transparent communication", "digital interventions", "OEMs' lost sales deals", "reputation damages", "sales impact" were used frequently in the interview responses.

The participants' interview findings highlighted several recurring themes surrounding port congestion, primarily focusing on the inadequacy of infrastructure, inefficiencies caused by manual processes, and the impact of external factors like weather and cable theft. Participants strongly advocated for digital interventions and integrated planning to enhance the overall efficiency of port operations. Additionally, human resource limitations

and issues with real-time tracking systems were frequently cited as obstacles. The analysis also revealed a preference for export prioritisation and a need for better risk management and communication across departments to mitigate delays.

4.5 Conclusion: Addressing port congestion challenges

"Successful planning" was the term used to capture how the organizations have adapted to manage port congestion. Participants have implemented a range of planning approaches within their organizations, including planned operations, daily briefings, operational discussions, and analytical data to evaluate the cargo arriving at the port, as well as utilizing global positioning systems (GPS) to detect any congestion problems at the Durban port. The participants highlighted the necessity of organizing any operation to reduce expenses and ensure that car carrier drivers operating at the port are not stuck in traffic without essential facilities such as restrooms or access to food and drinks. They also elaborated on the challenging situations that truck drivers face due to adverse weather conditions and the need to sometimes spend the night waiting in line, leading to unsafe working environments.

The thematic analysis highlighted the recurring issues of infrastructure inadequacies, manual inefficiencies, external disruptions, and the need for digital solutions. These align closely with the research objectives in the proposal, which aimed to provide insights into the causes of congestion and develop strategies for improvement.

By linking the findings of the thematic analysis to the research proposal, addressing port congestion in South Africa's automotive industry will require a multi-faceted approach, including infrastructure upgrades, digitalisation, and better coordination amongst stakeholders. Solutions will need to focus on capacity expansion, risk management, and enhancing competitiveness through more efficient operations and better use of technology.

This expanded summary provides a detailed understanding of how the interview themes contributed to the research problem and objectives, offering a comprehensive analysis that integrates participant feedback with the study's goals.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The topic of port congestion has been a longstanding issue for many years, and the congestion problems at the port of Durban have recently gained attention in business news due to their adverse effects on the automotive industry. The primary objective of this research was to identify the factors contributing to congestion in the port of Durban and to suggest solutions for the obstacles encountered by the automotive sector related to port congestion. Participants highlighted several key issues, including adverse weather conditions, inadequate infrastructure efficiency, cable theft, and insufficient berth capacity. Disruptions in the supply chain play a crucial role in the causes of port congestion and the transportation of vehicles and their components.

5.2 Recommendations

The initial phase in the value creation process is the smart port, which entails the digital integration of port operations to transform a seaport into a smart one by connecting all port stakeholders to enhance operational efficiency. For the port of Durban to achieve smart port status, it is crucial to collaborate with all involved parties, and focusing on immediate improvements will pave the way for a more sustainable path towards becoming a smart port (Berns et al., 2017). Despite the findings suggesting that the Durban port is not prepared to become a smart port, it is recommended that Transnet port managers and government representatives integrate specific components of the smart port framework, given the ongoing digitalisation era that has enabled businesses to optimize their operations.

The literature review provided what Queuing Theory on ports entails, which proposes a model that will adopt a streamlined approach to managing port congestion through a formalised queuing process. This theory can assist in understanding how better scheduling and communication within ports can improve inefficient berth allocations. By combining the Port Framework (Appendix H) with the proposed model for this study (Appendix G), an in-depth understanding of how operational efficiency can be enhanced through assisting port operators with tracking arrivals, scheduling shipments, and providing real-time vessel updates. There is also an opportunity to gather insights into how traffic control within ports can optimise berth times and manage vehicle flow

effectively. Subsequently, applying the Queuing Theory, the Port Framework and the proposed model can improve communication amongst stakeholders, which is crucial for managing port congestion and mitigating delays.

The resolution of this issue will enable the port of Durban to effectively compete as a significant driver of economic development in our nation. The primary aim of Queuing Theory should be to streamline business operations.

The study found that effective planning is crucial for any organization; inadequate planning typically leads to unsuccessful execution. Every participant made sure to reduce the likelihood of port congestion through improved planning and implementation with Becker et al. (2012), Gidado (2015), Mather and Roberts (2015), and Hancock (2020) having emphasised the importance of planning. The initial phase of introducing any innovation involves planning and addressing the following questions: why is it being introduced, what is being introduced, and how will it be executed? During the planning phase, it is crucial to engage stakeholders or their representatives, as their participation allows them to feel included in the solution process. The discovery phase focuses on pinpointing opportunities by examining the reasons behind port congestion and grouping them into straightforward themes; the solutions offered by participants and the literature review can be aligned with these themes. This approach will help ensure that during the development phase, the appropriate technology is recognized to tackle the issue and achieve the desired outcome. (Kahn, 2018).

The study indicated that inadequate communication with the port was a problem, and it highlights the significance of including stakeholders in the decision-making process, which raises concerns about how communication is disseminated to stakeholders or how Transnet is interacting with them.

Participants expressed that increased automation at the port and a transition to a smart port system, which would reduce dependence on labour, is necessary. This aligns with the observations made by Deloitte Port Services and Wootton, who noted that smart ports utilize new technologies to enhance efficiency and productivity by improving their use of space, time, energy, and resources. (Deloitte Port Services, 2017; Wootton, 2025). Participants elaborated that the port upgrade and investment of port infrastructure needs government intervention and attention.

Participant F's comments of handling of information, not a manual process but more digitalisation, the use of biometrics for drivers, review of manual documentation beforehand are aligned to Gidado (2015), who stated that port congestion in Africa is caused by either capacity constraints or procedural delays, and moving to a stage of digitalisation can relieve some of the port congestion issues faced. Participant J mentioned that motivated employees would boost productivity and noted that improving the recruitment process should also be taken into account. Similarly, Snelgar et al. (2013) contend that for organizations to maintain efficiency and profitability, investments in employee training and development should be made through the creation of effective reward strategies. It is important to recognize that acknowledging individual differences is a crucial aspect of formulating a successful reward system.

5.2.1 Recommendations One

- **Smart port**

The incorporation of digital solutions into the port's operations aims to transform the seaport into a smart facility by connecting all participants involved, thereby enhancing efficiency in port operations. However, for the Durban port to evolve into a smart port, it is crucial to collaborate with all stakeholders while focusing on achieving immediate improvements to create a more sustainable path toward attaining smart port status. (Berns et al., 2017). Participants expressed that increasing automation at the port and transitioning to a smart port framework, which would reduce dependence on manual labour, is essential. This perspective aligns with the insights from Deloitte Port Services and Wootton, who emphasized that smart ports and the implementation of advanced technologies can enhance efficiency and productivity by optimizing the use of space, time, energy, and resources. (Deloitte Port Services, 2017; Wootton, 2025).

5.2.2 Recommendations Two

- **Increase port births allocation**

The port of Durban has limited docking spaces for car carriers. Larger vessels are sent to the New Pier due to the shallow depths at the Durban Container Terminal (DCT). Increasing the depth of the berths at DCT would facilitate the docking of bigger ships. This trend is evident in the maritime industry, where ships are becoming larger to accommodate greater cargo loads.

5.2.3 Recommendations Three

- **Digitalisation**

For a sustainable approach, ports need to shift from manual processes to digital ones; each participant in the supply chain must play a role in reducing port congestion, including shipping companies, vehicle carriers, rail operators, port terminals, and logistics service providers; using digital cameras to pair trucks with their assigned containers; all activities within the port should occur electronically, reducing the time drivers spend waiting during processing and manual scanning.

5.2.4 Recommendations Four

- **Improve port infrastructure**

Several participants expressed that a reliable rail infrastructure could significantly reduce the congestion faced by the port of Durban. They pointed out that enhancing the rail system would be an immediate benefit and should be prioritized by Transnet. Additionally, they mentioned that the government ought to contribute by allocating more funding to improve the rail network.

5.2.5 Recommendations Five

- **Improve communication with stakeholders**

The Durban port ought to involve and interact with all interested parties, particularly those in the automotive industry, to gather feedback and recommendations, as this could significantly enhance the working conditions both within the port and in its vicinity. Participants expressed worries that port workers fail to communicate their problems and limitations promptly or engage in dialogue with their stakeholders to grasp their frustrations and explore potentially more efficient operational methods for the port. Participant F stated that better communication channels should exist between the port and the stakeholders.

5.2.6 Recommendations Six

- **Rail and infrastructure upgrade**

It is suggested that South Africa should prioritize investment in and the development of its rail infrastructure, as doing so will directly reduce the port congestion currently faced. The participants agreed that enhancing the rail system would yield quick results and should be a top priority for Transnet. Participant H made a significant observation, asserting that the port needs to negotiate with tenants to optimize the use of port space to fully take advantage of Durban's status as a hub. Participant H also stressed that if this is not feasible, the port should consider storing export containers onsite while relocating imports to an offsite location. A comparable approach is utilized in Keelung, Taiwan.

5.3 Research Limitations

The research examines the effects of port congestion on the automotive sector and seeks to find methods to reduce delays in delivering vehicles to customers. However, it might overlook additional challenges affecting the motor industry's competitive position in vehicle production. This study is limited to the port of Durban, where BMW manages vehicle loading and unloading, and does not consider other ports such as East London, Port Elizabeth, or Cape Town.

5.4 Suggestions for Future Research

Given the nature of the research, applying different methodologies might be needed to gain better results in modelling the problem of port congestion in Durban. Therefore, applying either Queuing Theory or simulation modelling techniques might be visible for future research to model the problem and gain better understanding for the common factors contributing to the increasing of the port congestion problem at the port. Additionally, the method of data collection employed, specifically the restricted visit to the port of Durban by the researcher, may not have accounted for all scenarios related to vessel berthing and the arrival timing of car carriers for cargo removal from the port (Guan, 2009). Further research into assessing the effectiveness of port operations and berthing capacity at the port is needed, as research has indicated that this needs further investigations.

Participant J made an important observation about contrasting the operations of Cape Town's port with those of Durban, noting that Cape Town faces windier conditions than Durban. There is a need for further investigation into the operational differences between ports, despite both being overseen by Transnet. Guan (2009) suggests that upcoming studies aimed at addressing port congestion should not solely depend on statistical Queuing Theory, as this approach can lead to inaccuracies in determining the waiting time for car carriers and in quantifying the associated waiting time costs for trucks. (Guan, 2009).

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Appendices:

Appendix A : Research Questions

Research questions

- 1) How does the quality of port infrastructure, particularly the inadequacy of rail systems in South African ports, influence port congestion?
- 2) What strategies can enhance operational productivity competitiveness and mitigate congestion in these ports?
- 3) How do port operators balance the demand and supply aspects of gate services to mitigate congestion at port accesses and gates?
- 4) What impact does port congestion have on the OEMs (Original Equipment Manufacturers)?
- 5) How do weather conditions, seasonality, and unexpected events affect congestion levels at port gates, and how can they be effectively managed?
- 6) How does port congestion impact an OEMs competitiveness when vehicles are jammed at port due to port congestion?

Appendix B : Interview Guide

Employees Interview Protocol or interview guide

Interview Protocol: Exploring Port Congestion Challenges in the Automotive Industry

Introductions

- Self-introduction (Researcher)
- Self-introduction (Participant)
- Consent to record
- Aim of the study

The primary objective of this study is to examine the nature of port congestion challenges within the automotive industry.

Introduction:

Good day, [Name of the participant], thank you for participating in this study on port congestion challenges within the automotive industry. Your insights are valuable to our research. Before we begin, I would like to confirm your consent to participate in this interview and assure you of the confidentiality of your responses. Do you have any questions before we proceed?

Port Infrastructure

PI1. How would you describe the current state of port infrastructure systems, in South African ports? (Probe: current issues with other infrastructure like road and rail)

PI2. How does the quality of port infrastructure contribute to or worsen port congestion issues? (Probe: impact to performance, market conditions)

Port Strategies

PS1. What strategies or measures can be applied to improve operational productivity and competitiveness in ports, in so doing mitigating congestion? (Probe: competitor strategies, digital interventions, current processes)

PS2. Are there any specific initiatives or best practices that you believe have been effective in addressing port congestion challenges? (Probe: digitalisation of processes, streamlining operations)

Port Operations

PO1. Can you describe how port operators manage the balance between demand and supply aspects of gate services to ease congestion at port accesses and gates? (Probe: impact to stakeholders and business partners)

PO2. What challenges do port operators typically face in this regard, and how do they go about overcoming them? (Probe: current measures in place, what digital interventions have been implemented so far)

Competitiveness

C1. What are the primary impacts of port congestion on OEMs (Original Equipment Manufacturers)? (Probe: Do OEMs lose out on customer sales, do vehicles end up in bond for longer periods due to delays at port)

C3. How do OEMs typically respond or adapt to mitigate the negative effects of port congestion on their operations and competitiveness? (Probe: pricing, relationship with customers – cooperative or arm's length)

External factors causing port congestion.

EF1. How do weather conditions, seasonality, and unexpected events contribute to variations in congestion levels at port gates?

EF2. What strategies or procedures can be implemented to effectively manage these external factors and minimise their impact on port congestion?

Other

O1. Can you elaborate on the specific challenges faced by OEMs when vehicles are delayed at port due to congestion? (Probe: core competencies, costs)

O2. How does port congestion ultimately affect an OEM's competitiveness in the automotive market? (Probe: internal relationships with stakeholders)

Conclusion:

Thank you once again for your time and valuable insights. Your input will greatly contribute to our understanding of port congestion challenges within the automotive industry. If you have any further comments or thoughts you would like to share, please feel free to do so now. Otherwise, our interview is concluded

Appendix C: Transcripts of Responses

Invitation to participate in Research Study- 20240822_140204-Meeting Recording

August 22, 2024, 12:02PM

21m 36s



Interviewer started transcription

Interviewer 0:07

So just as we discussed this, I'm going to have categories or certain points that we will talk about in our discussion.

So port congestion has been a challenge in the automotive industry and firstly, I'd like us to start looking at port infrastructure. So my question to you is, how would you describe the current state of port infrastructure systems in South African ports?

Participant

B0:34

Well.

I'm not to answer this 'cause I'm not directly involved in the the ports side of the business in terms of I've never been to the port physically, so I've never seen how it's structured, how it works, I just rely on the the car making its way to VDC.

Interviewer

0:54

OK. But in terms of the infrastructure besides port infrastructure systems, how would you describe issues that affect port congestion?

Participant

B0:56

60

Thank you.
At the point.

Interviewer 1:06
Just in general.

Participant B1:09
Alright, well, I think we.
I'm trying to. I'm trying to think of how to tackle this answer, but I think.

Interviewer 1:17
No problem.

Participant B1:19
By infrastructure, do you mean in terms of like our transportation tracks, the train piece for transporting cars?

Interviewer 1:23
Correct, correct.
Yes, absolutely.

Participant B 1:27
And everything.
But one thing I know is that we do rely on suppliers to assist with the transportation of vehicles. So I do think.
From I'll speak from what I experience from my side, I think what is needed is for us to have maybe not more supplies, but for them to increase the infrastructure in terms of having more trucks available and increasing employment by having more people to facilitate the whole transportation of units to the VDC.

So I generally experience the challenge when there's a delay in transportation, and then I'd assume that maybe there's a delay 'cause there's no track available to collect the car or the truck that Wayne's cannot take a certain number of capacity there. Therefore it leads to a delay in a certain unit making its way all the way to VDC.

Interviewer

2:14

So let me pose the question this way. Since you deal with the truck side of things, how would a congestion at port or delays at port have an impact on that particular transportation system, which is obviously from port onto the trucks?

Participant

B2:31

Because what I do with the the end of the the line which is selling the car so. My delay would be I'd be waiting for a car and it's not arriving because there's a congestion at the port. It's not arriving because there's no transportation. It's not arriving because the track is delayed or the the processes that take place on the hardware delayed for the cards. You leave the hardware and actually make it cvdc.

Interviewer

2:55

OK. So just continuing on the subject of infrastructure, how does the quality of port infrastructure contribute to or worsen your congestion issue?

Participant

B3:10

OK, usually it it worsens the situation because we we wouldn't be able to make our targets for that certain month and we would have to then.

Interviewer

3:18

Mm hmm.

Participant

B3:20

Rely on the units that are available so that congestion would have fixed the target of the month and our working structure, because now we have to rely on units that are here because it cannot now rely on units that are at the ports or stuck in the congestion or not here due to the lack of infrastructure.

Interviewer

3:37

OK. So in other words, it does affect your ability to perform in the market?

Participant

B3:41

To perform in the market years and to to reach our targets at the end of the line, because now we don't have the car to deliver to a customer, this thing boils down to our relationship with the customers because now they don't understand that you'll be waiting for your vehicle to arrive. So it it then boils down to the the sale and that's why I'm mostly involved to the actual sale process of the vehicle being delayed due to the fact that the car is is not arriving.

Interviewer

3:49

Mm

hmm.

OK.

OK, so that's an interesting perspective of it. And I know that you've mentioned that you're not too involved in the the port side of things, but let's talk about strategies in terms of port and this is now from your point of view and your experience, what would what strategies or measures can do you think can be applied in order to improve the operational productivity and the competitiveness imports?

Participant B4:14

In the port, yes.

We're covered.

I think our suppliers would need to.

To grow bigger, get get more infrastructure, get more employees, get more people on the hands working at the port, ensuring that the cars are transported and was, importantly, are transported safely because sometimes you find when the car is being loaded, there's a damage on the car or something. So I think ensuring that our suppliers grow and they're able to meet the demand that we need the site because we're waiting for the call. So if they would grow and have more facilities, more trucks available to assist with everything, that would make the end of the line.

Interviewer

4:41

Mm hmm.

Participant

B5:11

Seamless and would actually be able to reach our targets.

Interviewer

5:15

OK. So you've mentioned I think a few Times Now that the supplier doesn't, you don't need more supplies, but you need growth within the supply network. So just from that perspective?

Participant

B5:23

Yes.

Interviewer

5:26

Do you believe that's one of the strategies? By growing your supplier that you would be able to overcome the challenges?

Participant

B5:32

Yes, I think that would be the strategy. 'cause, we already have a good relationship with them. So we wouldn't want to source someone else, but instead we could work towards growing them so that.

Interviewer

5:36

Mm.

And when you say growing them, what exactly do you mean?

Participant

B5:46

OK, so obviously I wouldn't know the exact problems that have they 'cause I don't work directly with them but from from what I would see I I I just think it's simply having more hands to assist with facilitating the transportation so maybe they should employ more people, have more truck drivers have more people working at the harbour, have more people working at at VDC when uploading the cars to assist with with everything.

Interviewer

5:53

Mm

hmm.

Mm

hmm.

OK, so definitely there's a need for more resource and then.

Participant

B6:17

Yes, need for more resources.

Interviewer

6:19

With. With that being said, are there any specific initiatives or best practises that you believe can be effective in addressing port congestion challenges other than what you've mentioned?

Participant

B6:32

So far I don't have any. I'm trying to think in the spot.

Interviewer

6:35

The digital processes, do you think digital can play a role in in providing seamless operations?

Participant

B6:41

Yes, definitely. Umm definitely with need a digitalization 'cause. We work on Sep so tracking that and we have to having to rely from on different departments cause like for instance where I work, I don't have much information on what's happening at the ports. All I rely on is dates to say this is these are the dates, this is the information. So if there was a better system in place for me to be able to see information without having to ask someone else to say when is the ship ducking? When is this car arriving? That would be very.

Interviewer

6:47

Mm

hmm.

Hmm.

Participant

B7:13

Very helpful.

Interviewer

7:14

So in other words, a broader and more transparent communication. OK, that's interesting.

Participant

B7:18

Transparent communication, yes, and that would that would if we had a better system, that would be very helpful.

Interviewer

7:26

OK, so there's definitely a growth implications if if communication is improved and systems are improved.

Participant

B7:30

Implication.

Yes, 'cause, we usually have to rely on other departments, someone else to give me the full information that I need. So then manage my end which, yeah.

Interviewer 7:39

Yeah.

OK, cool. And then in terms of the operations?

What operations again, just remember that I am aware that you're not that familiar with port, but you've obviously experienced working at the end, so you know you know how the effect is on your side. So can you describe how port operators manage the balance between demand and supply aspects at the gate or at service gates?

Participant

B8:03

Yes.

I wouldn't know. I wouldn't know how to how to manage, but I I'd I'd like to believe they have a system in place to say when this ship arrives.

Interviewer

8:20

OK.

Participant

B8:26

For example, if this meant to be targeting to sell expense so that ensure that let the expans get loaded first, let them leave because the customer's waiting for them.

Interviewer

8:30

Mm

hmm.

OK, so there's definitely some form of strategy that they use to manage that, OK. And then have you ever had an incident where weather conditions have affected your your end result?

Participant B8:39

Some form of strategy, yes.

Oh, yes, yes, they're there. There was an instance at the ports. I don't remember what exactly happened, but there was a delay in the ship actually arriving. And that was a miss for that month because now we had to delay all the sales by like and push them to the following month, meaning that.

Interviewer

8:57

Mm

hmm.

Mm.

OK, so that.

Participant

B9:10

It had a very big impact on our target, meaning that in that current month, we had to now source from cars that are available because something happened at the ports with the ship. And now those cars cannot make it in time. So that affects the whole sales market. Parental everyone is waiting for car, but now they can't get it.

Interviewer

9:21

OK, so it definitely has.

Participant

B9:30

And it resumes.

Interviewer

9:31

And now that you so just on that, I like that storyline because it's it's actually quite informative.

Has that had like a lingering effect on the demanded supply because you've had to now push out your sales, which were planned for the month before, and it didn't happen. How did that impact, you know, what was the impact for the rest of the business following that incident for the following months?

Participant

B9:54

Obviously they they had, we had to reduce our targets for the current month, but there's always hope to say that in the following month we will cover this gap because those calls would now be here. So in that current month, it was just a bit this motivating, frustrating now every year and especially the dealers now they have to get replacement cars, check what's available. It is just a stressful situation. So we can make the number even though they try to retest the number, we still see that it it's difficult to actually close that gap because now if you expecting 50 cars and they're not coming now we have to.

Interviewer

9:58

Mm hmm.

Participant

B10:28

Get other cars. That means dealers have to. Now either look into other customers

because what if the current customer's reluctant and they wanted that specific unit that was underway. So it stresses from the head, from the head, from the head office Department stresses the VDC people stresses the the retailers boils down to the customers and it's complicated.

Interviewer 10:28

Mm hmm.

Mm hmm.

OK, cool. So yeah.

Participant B10:51

But it's brings hope because in the future, in the next month, we do then know that we have a head start even though it's not good to say we have a head start because the following month we'll add a disadvantage.

Interviewer 11:03

Yeah, absolutely. So you're playing catch up basically?

Participant B11:05

We're playing catch up. Yes, we're playing catch up.

Interviewer 11:08

OK, so I'm going to talk more to your line of things now. I'm going to talk about competitiveness. Right. And you work obviously at the end of the line where you, you know, the end customer is important to you. So with that in mind, what primary impacts of port congestion?

Participant B11:18

Yes.

Interviewer

11:26

What is the primary impacts that port congestion has had on you as the OEM?
You know, keeping in mind that you've got customers.

Participant B 11:36

So the primary impact would be loss of sales.
'Cause, we would lose some customers to other dealerships, other brands, other other automotive industries. So with that loss of sales that then affects the whole everything that I kind of spoke to you in terms of our targets for the man effects, our working structure because now we have to stay up late trying to catch up and get work done trying to find replacement units. So instead of me now doing my day-to-day work, I'm sitting here hunting for cars.

Interviewer

11:48

Mm

hmm.

OK.

Participant

B12:10

Customers. So yeah, that affects us a lot.

Interviewer

12:14

And and other than loss of sales, what other impacts? What other financial impacts can can you endure, you know, due to these delays?

Participant B 12:24

OK, obviously with lots of sales being the main.
Key performance indicator that will then obviously pull down to finance because now the financial sector will not reach its target because we didn't sell a certain number of cars that we dedicated to say in this month we will make this number

that will then also now boil down to the financial services. They now also are affected that will go to the retailer level because they need to sell a specific number of cars for them to get paid for them to get their commissions. Now in case that dealer doesn't sell because we had.

A port congestion and they couldn't get their cars.

Now, now they're angry because they'll blame us. No, I didn't get the car. I had the customer. But the car didn't arrive. Now, I didn't make my targets, and we'll be very firm to say no. But you know your target is this amount of numbers of cars. And you didn't make it. Which then brings the whole trace of. He now had the dealer now has to try and replace the cars, get new customers, go out there and try to make his number. So it boils down it boils. It's kind of like boils down to everyone. That's how I've experienced it. Yeah.

Interviewer 13:09

Hmm.

Mm hmm.

OK, so it does have.

OK, so there's definitely a a ripple effect in the delay and it doesn't only just affect your business, but the the entire chain.

Participant

B13:31

I'm not

doing.

And tighten? Definitely yes.

Interviewer

13:37

OK, so how do you typically respond to that? How do you adapt to it? How do you mitigate the negative effects that port congestion has caused on your competitiveness?

Participant B13:48
The other department that deals with stock management, so they will then.

Interviewer 13:52
Mm hmm.

Participant B13:55
Have to sit down, see what's available. We'll have endless meetings trying to source vehicles, trying to structure even our. My Cpu's will then have to sit down. Strategize. Do we reduce our number? If not, how will we reach our number?
So everyone has to now play their parts to to try and reach it. And since we have a lot of different channels, for example, there's a reinsource section.
We might find the Reinsource section might have to update number to cover for the dealerships not making their number, so it's honestly it's all managers have to sit down and we kind of try to find ways to to find a solution.

Interviewer 14:22
Hmm.
Solution process or that strategic meeting that takes place at that level would you describe it as?
Solution driven? Or is it reaction? Is it a proactive meeting or is it a reactive meeting? OK, we've got the delay, so now let's talk about it. Or do they continually anticipate possible poor challenges that could affect the business?

Participant B14:57
So I think it's more reactive to say cause 'cause every every month would obviously plan to say this is our forecast. This is how we're tracking and then if boom a problem happens, we have to reactivate. So now they'll sit down and try

to find solutions. Each manager will go to their teams. Now we need to start working implementing everything. They will sit down maybe three days later, see if the the solutions they had worked. If not, they'll look for more solutions. So it's always a touch base try and find the solution, work on it, see if it's working.

Interviewer 14:59

Mm hmm.

Mm.

Mm hmm.

Participant B15:27

But then what do they have to make sure when the month ends, whatever reactions they had, they have to see the positivity from that.

Interviewer 15:34

Do you think that if they had a more proactive approach, it could be a better strategy?

Participant B15:40

Yes, yes, 'cause it's very stressful. Now. They come back from a meeting. They're like, you know, we have this problem now. We have to do this. Stop whatever you're doing, act on this. So that also effects everyone in the office. Also. 'cause. Now we have to.

Interviewer 15:41

OK.

Mm hmm.

Do what you know.

Participant

B15:54

React to the to to solving the problem, yes.

Interviewer 15:57

OK, so now that we've discussed that, let's talk about external factors, things that we can't control like Mother Nature, you know, political issues, unrest and unexpected events. So how do weather conditions, seasonality and as we said, unexpected events contribute to congestion issues. And I know that you deal with the end user, which is mostly Rd transport, but surely there is an implication when the ports are congested due to these issues.

On on your end. So what are those implications?

Participant

B16:29

Yes.

Mostly. Basically, I wouldn't have. I won't be able to sell the the units that I had anticipated to sell, so the implications would be that I need to let go of the deal, find a replacement units. If I'm honestly failing 'cause sometimes some models there's no stock and we're waiting for that particular stock. So it's it's mostly managing the expectations of the of the customer, the the in line.

Interviewer

16:41

Mm

hmm.

Hmm.

Mm

hmm.

OK. So just before this, we spoke about the fact that management has a reactive approach to to how congestion affects the delivery of vehicles or the arrival of vehicles. Now this question is for you as as an expert in your field.

Participant

B17:14

Yes.

Interviewer

17:19

What strategies or procedures do you believe can be implemented to effectively manage these kind of factors? You know other than external factors, but also the fact that port will be congested. So what do you think you could do differently? To minimise the impact.

Participant

B17:36

And I think you mentioned something about the utilisation. I think that is the one thing that we would need. I do know that it is trying to improve things, but we do need a system in place. We, for example, I would be aware of the fact that there's a congestion at the port, so I would be able to manage work before waiting for a reactive instruction. So basically upgrading our our communication channels information.

Interviewer

17:39

Mm hmm.

Participant B18:06

Being able to know what's happening.

So that would be very would be one of the strategies I would hope they implement.

Interviewer

18:14

OK.

Participant

B18:15

In the future, yes.

Interviewer

18:17

OK, cool. Can you maybe elaborate on any specific challenges that you've ever come into due to port delays?

Participant B18:26

On my end I just deal with angry customers.

Angry customers frustrated 'cause sometimes you find someone. So take car now. They the car they're waiting for is delayed. Honestly, they they it's. It's not nice having to manage someone's expectations and and keep making promises so it becomes extra work because now I need to update you almost daily to say no. Your car is underway. No, now it's now. It's under. It's being offloaded. Now it's arrived at VDC or now it's just being loaded into the into the parking Bay. So.

Interviewer

18:36

Mm

hmm.

Hmm.

Participant

B19:00

I'll you'll get your car in in two days time. So it's really hard.

Interviewer 19:04

So just just because you deal with the customers, so I think this question is really directed to to that what speaks to that angle?

How does port congestion ultimately affect your competitiveness in the marketplace in the automotive marketplace?

Participant

B19:20

I was having to meet him once and a target that puts a lot of pressure on us because.

Interviewer

19:22

Mm

hmm.

OK.

Participant B19:28

If other, if other, if our competitors are being able to effectively reach their numbers and we aren't because of port congestions, that now puts a lot of pressure on the whole, the whole group.

So yeah.

Interviewer

19:43

And reputational issues, do you think that it has an impact on your reputation as a business?

Participant B19:47

It does, but it's like I believe we tried to deliver.

And and manage and communicate so that we maintain our reputation in our standard.

Interviewer

19:58

OK, OK.

Participant

B19:59

That's yeah.

Interviewer

20:01

Oh well, that's interesting. OK, cool. I think that we can conclude. Do you have any thoughts or any last comments that you'd like to make before we stop the recording?

Participant

B20:12

I just wanted to another this research study that we are having. Whatever solutions will come out of this first of solution that will come out this will they be implemented in the future to say we hope so that that's my one hope to say. You know we from this research it may be implemented to actually make everything better so that if because I feel like the port condition I'd say it's one of like.

Interviewer

20:16

Yes.

We hope that we hope that.

Participant

B20:38

It's the starting point of the problem.

Interviewer

20:40

OK. That's a very interesting statement that you made.

Participant

B20:41

So if that if that if.

Yes, 'cause the call the call be produced. It would be on its way. But then there's just a delay with it arriving. So if that is sorted out that would be perfect.

Interviewer

20:53

For you especially and your customers.

Participant B20:53

Definitely.

That would be that would be definitely sorted. So our suppliers just need to grow. We need to have a digitised and a proper system in place for us to always be informed and not having to rely on other departments.

For information.

Interviewer

21:09

Oh well, that's very valuable. Thank you once again for your time and your valuable insights.

Participant

B21:15

Thank you.

Interviewer

21:16

Your input is greatly appreciated and will definitely contribute to the understanding of poor challenges with reference to the automotive industry. So thank you. This interview is concluded. I'm going to stop recording now.

Participant

B21:24

And to see if.
Thank you so much Yvonne. Fine. Thank you.



Interviewer stopped transcription

Invitation to participate in a research project- 20240829_140848-Meeting Recording

August 29, 2024, 12:08PM

17m 5s



Interviewer started transcription

Interviewer

0:31

So my first question to you is, how would you describe the current state of port infrastructure systems in the South African ports?

Participant

F0:43

I I can't really comment on it because I haven't dealt that closely to it, but I'm I'm exactly know what the state of the port is.

Interviewer

0:51

And just in your opinion, if we if we talk about current issues surrounding infrastructure in South Africa regarding road and rail, what is your opinion on that?

Participant F1:03

I've considered opinion on it would be that.

It's most likely there's a element of lack of maintenance on it, and certain delays can have a negative impact on on sales volumes and and from import and export perspective.

Interviewer

1:23

When you when you talk about delays, can you maybe just elaborate on that, you know, to what extent is the infrastructure play a role in delays?

Participant

F1:32

Well, cable theft, for example, the lying trains, moving vehicles in and out of the port.

Interviewer

1:36

Mm

hmm.

Mm

hmm.

OK.

And then in terms of the quality of port infrastructure, how does it contribute to or worsen the the current port congestion issues that that we faced with?

Participant F1:55

I can't really comment. I don't know the exact state of the port. All I've experienced in my career is certain delays due to.

Cable theft and all other maintenance trains get stuck and cause that reach its in destination in time quick enough.

Interviewer

2:11

Does that have an impact on the performance?

Participant

F2:15

Performance in terms of.

Interviewer

2:17

Your business performance.

Participant

F2:19

Well, it could have if it if the calls don't if any any items that are exported or imported don't reach its its distribution centres in time. It does have a negative impact because it causes unnecessary delays.

Interviewer 2:21

Mm hmm.

Mm hmm.

OK. And what that means, Sir, let's talk a bit about port strategies.

What strategies or measures do you believe can be applied to improve the operational productivity and competitiveness imports and this is your opinion or your view on it?

Participant

F2:52

Once once again, my my opinion not talking on behalf of anybody, my opinion is that a country like South Africa cannot rely too heavily on one specific port. You need to build in at the four options.

Interviewer

3:04

Mm

hmm.

OK, so let's talk more about the alternative options. What would you foresee as as an acceptable level of alternative options when it comes to alleviating port congestion issues?

Participant

F3:19

Well, first of all different port closer closer to the the main centre in South Africa

where 60% of GDP happens in in the hurting region, I believe that we might need to improve the efficiencies of the likes of Richard Spy and perhaps Steven and P/E.

Interviewer 3:39

Mm.

Hmm.

Participant F3:43

To to to spread the load.

Interviewer 3:46

OK, and what about?

Participant F3:47

And and and maybe put you to a sit next day.

Interviewer 3:51

OK, so that can definitely have a positive impact and and and what about digital interventions or you know process management or you know changing of processes, do you believe that that could be a strategy?

Participant F4:07

From my experience in the multi industry in South Africa over the last 24 years, the bulk of vehicles.

Interviewer 4:15

Mm hmm.

Participant

F4:15

Automotive wise goes in and out of Durban and I don't necessarily believe without any facts just a considered opinion. I believe that the port doesn't necessarily have the right capacity to be able to handle the volumes. That's just market from what I've experienced at various OEMs that have worked for.

Interviewer

4:31

OK.

So you make a very interesting point on the capacity of the port. So that's something that. So do you think to some extent that the port strategy is not aligning to the demand and the supply of of you know vehicles coming in and vehicles going out?

Participant

F4:52

I would, I would say yes and and maybe not just vehicles, everything.

Interviewer

4:54

Mm.

Yeah.

Participant

F4:58

You know, we're talking all sorts of items coming in and out of South Africa. I don't believe that Durban necessarily the closest being to the central GDP hub of South Africa. I don't believe that Durban on its own has got the capacity to handle all the volumes for everything coming in and out of South Africa.

Interviewer

5:11

Hmm.

And and with that being said, are there any specific initiatives or best that you believe can be effective in addressing those issues?

Participant F5:29

Once again, it's difficult to comment because I don't know the port system that well I'm talking in from industry experience.

Interviewer 5:34

Mm hmm.

Participant F5:37

And I'm talking my considered opinion the the lies that I've seen over the years. Tells me that you know there might be a input and an export port would make better sense.

Interviewer 5:51

So having them like kind of separated and and and focused.

Participant F5:55

Yeah.

Interviewer 5:56

OK, that's a fairpoint. So let's talk a bit about port operations. And I know that you, you don't have much exposure to the port, but I think just talk purely from your experience. My next question to you is, can you describe how port operators manage the balance between the demand and the supply at the moment to ease that congestion?

Participant

F6:17

Don't comment on. I thought I never have information about it, but no, I don't.

Interviewer

6:21

Have you? Have you ever experienced a challenge where there was a certain demand for a certain amount of vehicles and it was affected by port congestion?

Participant

F6:33

Yes, I've expensive in my career but theatre.

Interviewer

6:34

And.

And how how? How is it managed on the end?

Participant F6:40

I'm not sure how it was many someday in, but on our end we had to rely on.

It's additional resources to help move the vehicles and we also had to rely on moving the vehicles by rail and by Rd.

More, more Rd mourn Rd than on rail due to certain inefficiencies on the road on the rail side.

Interviewer

7:03

OK. OK. So let's talk more about the competitiveness and I think this this comes back to, you know, OEM level and I think this is definitely an area that you can expand on. So my question to you is, what are the primary impacts of port congestion on an OEM? So from the Oem's perspective or dealership level?

Participant

F7:28

Oh, it ultimately boils down to the in customer. If the in customer can't get his call in time or his product in time, any product for that matter. Once again talking on behalf of the industry experience, if any customer can't get his or her call in time, it's got a negative knock on effect because the longer that gets delayed, the call values, especially on the trading side could get impacted because you know vehicle prices change on a monthly basis.

Interviewer

7:31

Mm

hmm.

Hmm.

Participant

F7:58

So if I can't get my replacement vehicle in time, it causes unnecessary depreciation on my existing car. That's just from a pure.

Interviewer

7:58

Mm hmm.

Participant

F8:06

Operational perspective, but you get customers that cancel that cannot wait any longer. They need wills and they can't understand and accept the delay reasons. But I think it's it's probably more impacted on on local OEMs that are exporting cars.

Interviewer

8:23

Yeah.

Participant

F8:24

In talking about everybody, if you can't export a car in time, it's money. Time is

money and the cost need to get out of the port sooner the better, because there's still going to be a period that the vehicles will spend on the water.

Interviewer

8:37

Mm hmm.

Participant

F8:38

Moving to the countries where it needs to go to and once again, any delay is costing the OEMs money, any delay, whether it's in or out it's costing you money, whether it's costing you interest on the capital, whether it's whether it's customers that are cancelling transactions, whether it's.

Interviewer

8:55

Mm.

Participant

F8:56

Coming up with alternative ideas to move the vehicles from point A to point B, any delay is causing money is costing money.

Interviewer

9:04

So so you would say that delays have a reputational effect because obviously the the customer has a bad perception. Now you've not delivered and definitely a financial impact on on your end. OK.

Participant

F9:15

Undoubtedly. Undoubtedly.

Interviewer

9:18

And then in a situation like that, how do OEMs typically respond to or adapt to those negative effects to, you know, to remain competitive?

Participant

F9:29

It it impacts on your cell's volume for a specific in a particular month.

Interviewer

9:33

OK.

Participant

F9:34

I mean, if we if we can't necessarily get vehicles through in time for the sales in a in a particular month, it could cost a volume and it's it's it's generally volume that you can't recover in the short term.

Interviewer

9:42

Mm

hmm.

Yes.

Participant

F9:46

So if if I miss my number this month from a sales perspective by 100 units, very difficult to catch the 100 up next month, so next month I'm not gonna sell whatever plus 100 it's it's you're just gonna sell next month's number. It's very difficult to quantify the the actual losses losses in terms of sales potential.

Interviewer

9:52

Hmm.

Hmm.

Yeah. So.

Participant F10:08

But if if you miss 100 units because of the lies, it's it's. It's very difficult to catch it up. It's it's it's because the market, you know the market is competitive, all the OEMs are fighting for their share of the pie. And if you've got a certain amount of time on a customer to try and put them into your product and if you missed that window frame, 90% of the time you're out of it.

Customers, I've got multiple options to the disposal. I can switch to a use core. We see it in the industry that a customer goes off in three days. If you can't reply the call in three days time, we could generally go and look at other use call or some or something alternatively so.

Interviewer

10:34

And.

Sure. That's actually interesting that it's three days. Cool off, eh?

Participant

F10:53

Customer journey cools off in three days. If you don't time up or convince him within a certain period of time, the chances is that he's most likely gonna be. He's gonna buy something else.

Interviewer 11:01

He's going somewhere else.

Sure. Wow. That's very interesting. I think with that being said, you know your relationship with your customers, you know, how do you then handle that? How do you manage that so that they can trust you that even if there is a delay, do you have something in place that says, look, we do have a customer relationship management programme?

Participant F11:20

But.

Well, what we generally try and do is firm up the finance. You know the the, the vehicle finance. If the customer's gonna finance the vehicle, we try and firm up the finance and at least if there's finance approval in place.

Generally, we've got some level of hold on the customer and we we try and offer a bit honest trading, but that's not necessarily enough to.

Interviewer

11:42

Mm

hmm.

Keep.

Participant

F11:45

To keep them in the loop, the ultimate goal is to get him the replacement vehicle, whatever that might be, as soon as possible, and if there's unnecessary deadlines or unpresidential delays on, you know, unacceptable delays on those on the new car, then customers tend to not accept that.

Interviewer

11:53

Mm

hmm.

OK. And let's talk about external factors. You know Mother Nature and things that we can't control because it does have a knock on effect in the end. How do weather conditions, seasonality and unexpected events such as political unrest, wars, how do they contribute to the variations in the congestion levels?

Participant

F12:30

We haven't, we haven't experienced too much of that. I think the Devon writes a couple of years ago had a bit of an impact and that was really the exception and thankfully we haven't seen many of those in South Africa.

Interviewer

12:30

92

At

port.

Mm hmm.

Participant F12:42

But, but if I recall.

My mind back to in 2020-2021, when the rise in Durban happened. It was a stressful period and we did battle to get our products through the through the system.

Interviewer

12:56

Yeah. OK. And then let's talk about other other things like other general stuff in, in an OEM space. Can you elaborate on any specific challenges that was faced by an OEM when vehicles were delayed due to port congestion?

Participant F13:17

Anything other than what we've already covered and and touched on, I think the big thing is.

Reports need to be operational and functional and and when I say port, it's not necessarily only the ports, it's also the rail infrastructure to get to vehicles to and from the distribution centres. And once again I'm talking on behalf of, of my own opinion and experience. I'm not talking about any OEM. I'm saying that if a call can't reach the port, it does put unnecessary stress and strain on the OEM to get the vehicles.

Interviewer

13:26

Mm hmm.

Participant F13:51

In or out of the port by means of rail and Rd.

Cost more to put a corner right on a carrier then to put it on a train. So we we

are were you trying to save money to put it on the train, the train can't supply the vehicles or broken horse cables stolen or whatever else in the train can't move. It does put loads of strain on on the system.

Interviewer 14:00

Yes.

Yeah. And then in closing.

Again, I'm gonna go back to the competitiveness, but I want to talk about competitiveness as a whole. So you know, we're going to look at the effects holistically. How do port congestion challenges ultimately affect and OEMs competitiveness in the automotive market?

Participant F 14:42

And once again, just reiterating the point, talking on behalf of experience, talking on experience, not talking about any OM in particular, but I would presume that.

Depends on whether the OEM is dependent on the port that continuously has the constraint or not. Give you an example. It's say for example VW as an example versus US or BMW. Our course come through Durban and somebody else uses the port in Port Elizabeth. Port Elizabeth doesn't have the same level of capacity constraints it could. It could result in an in.

An an advantage to whenever is dealing with a port or working through the port that doesn't have the continuous constraints.

Interviewer

15:26

Mm hmm.

Participant F 15:32

What I'd really equ quite in in terms of numbers, I can't tell you, it's difficult to quantify, but.

I have previously worked for OEM also.

Basically, work through through cooker and and and and the cooker port in Polish with and and we haven't experienced the same level of constraints on a continuous basis as as what of experience up here in the north in my time working for OEMs up in the north of the country in Port Elizabeth, they didn't have the same challenges as what the other OEMs are experiencing dealing with Durban.

Interviewer

15:46

Hmm.

Hmm.

Hmm.

OK, I see. So it's definitely there's definitely.

Participant

F16:10

But it's but, but certainly different different segments of the market, different types of vehicles. So not really I can't really comment from a competitiveness perspective, just talking business on a day-to-day basis.

Interviewer

16:14

Yeah.

Hmm.

No. Well, thank you so much for that. Thanks once again for your time and your valuable insight. Insights. Your input is gonna greatly contribute to the understanding of the the study. If you have any further comments or thoughts that you'd like to share, please feel free to do so now.

Participant

F16:40

No, I'm. I'm. I'm OK from my side. I think it's just important to reiterate that it's my considered opinion these items that I've listed to you and it's not on behalf of

any OEM. It's just purely experience over the last 24 years that I've experienced on the sales side of the business businesses.

Interviewer

16:56

OK. Oh, awesome. Thank you. Thank you so much. I'm just going to stop the recording.

Umm.

● **Interviewer** stopped transcription

Invitation to participate in research project- 20240823_103643-Meeting Recording

August 23, 2024, 8:36AM

21m 21s

● **Interviewer** started transcription

Interviewer

0:06

Just to give you a background, the research is on port congestion challenges within the automotive industry. So during our discussion today, we're going to look at certain areas or aspects that cause condition. And the first point of our discussion will be port infrastructure. So my first question to you is how would you describe the current state of port infrastructure system in the South African ports?

Participant C 0:21

And.

I'd like to be honest with you. I am not like quite clued up about what happens

96

at the port, but based on the stuff that I've read and.
Like based on my little research that I made also.
Would be the road and rail port infrastructure infrastructure that is not.
In in good condition.

Interviewer 1:00
OK. And when you say the road and rail that's not in good condition, what extent do you believe it has an impact on the port?

Participant C1:10
Because obviously it like things will not go as like things will not be able to go as normal if things are not in place or and like I believe those things are able to cause delays.
In terms of deliveries going in time and coming into the country on time as well, if those things are not in place, I I because I feel like they play a very vital and important role in the in the transport sector.

Interviewer 1:40
So would you describe the the infrastructure as poor average or needs a lot of work?

Participant C1:46
Average.

Interviewer 1:48
Average. OK, why would you say average?

Participant C1:51

Because I don't think it is all like that. Like I don't think it's that bad, but I I feel like I feel like they they they could.

Interviewer

1:57

Mm hmm.

Participant

C2:01

Like it could get better. You know? Like they certain things that that can be put in place to make sure that it looks better than what it does now.

Interviewer

2:10

OK, so look, I know that you have said that you've not really too familiar with port infrastructure systems, but my next question is how do you think the quality of port infrastructure can contribute to or worsen port congestion?

Participant

C2:27

Can you please repeat that question again?

Interviewer 2:29

How does the quality of port infrastructure contribute to or worsen port congestion?

Participant

C2:42

I am not sure I was OK OK.

Interviewer

2:42

So let me let me give you a little bit more background of context. If if, for instance, the port infrastructures were average as you as you've mentioned like you, you

believe that road and rail is average because it's not as bad, it gets the job done, but it could be better. So in the case of port.

Participant

C2:55

Oh yes.

Interviewer

3:01

Where there are certain challenges, probably we don't know the depths of them, but if they were average, how do you think it would contribute or worsen the congestion issues that we currently face?

Participant

C3:13

One, the trucks will wait longer, you know to load or to load.

Interviewer

3:16

Mm

hmm.

Mm hmm.

Participant

C3:19

#2 if the like with the with the containers as well, I think it would take like it would take longer for them to load them and put them like to load like the loading process would take much longer. Let me just say that because obviously the waiting time and the loading like there will be more downtime. You know if those things are not in place and they are not correctly placed.

Interviewer

3:37

OK,

OK.

Mm hmm mm.

Participant C3:50

There will be more downtime, like trucks will just stay in there for long. Ships will also be standing for very long because.

Of the delays that are caused by the infrastructure not being up to par.

Interviewer

4:03

OK. That's a very interesting perspective. And I believe that could definitely be an issue. You know, if those things are not working properly, so would you say that it would have an impact on the performance of the company if that's the case where trucks are waiting then?

Participant

C4:19

Definitely you did have definitely would have a like a terrible impact in in like let's say.

Interviewer

4:19

Ships are waiting.

Participant

C4:27

With the truck companies that rely entirely on loading and uploading at the port, you know like it would affect them badly, because now the downtime move where they are not loaded or they are not offloading in time. Then it like. I don't think they'll get as much work done as they would if things were in place.

Interviewer

4:34

Mm

hmm.

OK, so just not this. So we've obviously discussed port infrastructure to an extent. Let's talk about port strategies, right. And a strategy is always something that we use to either mitigate or overcome or to prepare ourselves. So those are the three

100

main reasons that companies reduce strategies. So with that in mind. We we talk about ports and we ask what strategies or measures can be applied. To improve operational productivity and competitiveness, imports.

Participant

C5:28

Are you? Is that a question for me?

Interviewer

5:31

Yes, that is a question. Sorry. What do you think? Sure. So what's what strategies or measures can be applied to improve operational productivity and competitiveness imports?

Participant C5:33

OK. Can you please just repeat that again? What do I think?
I think proper planning.

Interviewer

5:48

Mm hmm.

Participant C5:49

Like if I believe if you are better prepared for what is to come, it makes it makes it makes life a bit more easier.

#2 not buy two more than you can chew, so if you know that this is what you're expecting.

Cut it at like at least put yourself to say this will this will all. This is all that will be able to do on this day and then you don't take on more to avoid having people wait for too long or things not happening accordingly because.

You took on, too, too much than what you're able to handle.

Interviewer 6:30

I I like a term that she used biting, biting off more than you can chew.

Participant C6:33

Your chicken is.

Interviewer 6:37

So.

If, if. If that's the case, what is your opinion or what is your thoughts on having things like digital processes or digital intervening intervention? To to to help with these strategies.

Participant C6:48

Umm.

Yes, I spent time. It was like it's one of the stuff that I read about when I was preparing for this.

Interviewer 7:03

Well, let me ask it this way. Do you believe that digitalization can help with some of these issues where you say people bite with more than they can chew?

Participant C7:13

Would definitely. I think it like with everything like with every single company and every single.

Like in work environments, we are moving more towards like digital.

Digitalizing everything, so I think it would help with productivity.

Time management and as well as getting things.

Well, in time so that you are better prepared.

Interviewer

7:39

OK, that's fairpoint. My next question to you is, are there any specific initiatives or best practises that you believe have been effective in addressing port congestion challenges?

Participant

C7:58

I'm not sure I I don't think I'll be able to answer that one.

Interviewer

8:03

OK. Then let me ask, let me phrase it this way. If you were in charge of ports and you were asked to to change some of the processes and procedures within a port and the strategies, what would be the first thing you would change to make a difference?

Participant

C8:06

I can't.

Hmm.

Mm hmm.

What what I will change firstly would be what we just spoke about, which is infrastructure. You know, I would make sure that gets worked on to ensure that.

Interviewer

8:26

Mm hmm.

OK.

Participant

C8:36

Whether it's the road, the rail and the other stuff are in good condition. And then.

Interviewer

8:44

Mm hmm.

Participant

C8:46

Things like load shading because they also affect the thinging they they affect.

Interviewer

8:49

Mm hmm.

Participant

C8:53

The overall production of what happens at the port, we would make sure that we have things in place in case things like load shading happen, and then as far as weather is concerned, obviously that is beyond our control, but. Yeah. So those are the things that I will change.

Interviewer

9:12

OK.

So you would definitely focus more on getting the infrastructure to 100% in order to to as a strategy. OK, that's noted. So let's talk about operations. And again, I'm going to ask it to you as somebody who would advise and not so much with the experience, but how would you manage the demand the the balance between demand and supply at gate services to ease congestion if it were, if you were managing this process?

Participant

C9:20

Yes.

Like what we like. What's what I I said also earlier that.

Interviewer

9:56

Hmm.

Mm hmm.

Participant C10:06

If two days is like that, so I would have like I would plan my days accordingly to ensure that I don't take on too much #1 #2. I will always make sure I'm on top of my game in terms of.

Like with everything that's been going on, like with the weather.

Interviewer

10:25

M.

Participant

C10:25

Obviously I'll need to know like I'd need to know my weather forecast in my sleep because also that plays a very vital role with the, with the floods that had been happening and obviously things not being able to move.

Interviewer

10:30

Hmm.

Participant

C10:39

But also make sure I'm on top of my game when it comes to that. And then.

Interviewer

10:39

Mm.

Participant C 10:46

Obviously load trading causes a disruption as well. That is what what I would also want to know and want to make sure that everything is in in place so that we don't find ourselves in situations where we say we are out of diesel or we are out of we don't have enough generators to supply power.

Within the port to to supply power everywhere within the port. So I will also make sure that that is in place.

What else?

Yeah.

Interviewer

11:19

OK, well, you know, for somebody who says you don't have experience in port, definitely have the strategies. So that's very interesting. I think we should hire you for port operations.

Participant

C11:24

Yeah, yeah.

Interviewer

11:30

OK. That's that's actually very interesting. And I like the fact that you touched on on, on weather conditions because I think that's one of the reasons that.

Participant

C11:31

No.

Interviewer 11:40

Also caused some kind of challenges for the port operators. So my next question to you is again as a port operator.

Now you face these challenges with where the load shedding, etcetera. There's

certain things that we cannot control. So my question is how do you go about overcoming those issues if you are a port operator?

Participant C 11:54

Hmm.

Like you said, like that certain things are beyond our control. I think also communication plays a vital role in.

Port port like operations, you know, at least if you are able to.

Inform.

That companies that maybe are supposed to come and offload or to come and load at the port, or anything that needs to happen. If your communication is in place and they know that they, they'll be delays and stuff like that. At least they can also plan their things accordingly so that they don't promise.

Clients, things that they know they won't be able to deliver on time.

Interviewer

12:48

OK.

Thank you. And then let's talk about competitiveness, because infrastructure strategies and operations definitely have an end effect on your competitiveness as a company. And when I talk about competitiveness, I'm going to focus more mainly on the original equipment manufacturer or the OEM as we know it. So in this case, the OEM that we that we're discussing is BMW. So with all that we've discussed prior to this.

Participant

C 13:16

Yes.

Mm hmm.

Interviewer

13:20

In terms of its competitiveness, my question to you is what are the primary impacts of port congestion on an OEM?

Participant

C13:29

But to know you am again.

Interviewer

13:31

Uh original equipment manufacturer BMW.

Participant

C13:35

OK.

Can you like freeze the question nicely for me please?

Interviewer

13:41

OK, So what? So what do you believe are the primary impacts? So what are the main causes of of discomfort for BMW in terms of port congestion? How does it impact them? Where does it hit most?

Participant

C13:56

OK.

One it hits them on sales, you know, because obviously we may like you may come like you have your clients that you and you also want to meet expectations from your from a client's perspective. So they like if there's any delays that go on at the port.

Interviewer

14:10

Mm hmm.

Participant

C14:15

They reflect badly on BMW because obviously they would have made promises to clients and things if things if the product that the customer is waiting for, in this case a car.

Interviewer

14:28

Mm hmm.

Participant

C14:29

Then it it creates a lot of problems and there's a a bit of mistrust if you are not going to get something that you paid for in time, right? Because obviously you were told that on this day on this in this month you would have this. And then if it doesn't happen like that, obviously it's very disappointing and it it it it's it's inconveniencing because you also make plans knowing that I would have this thing by this time. Yes.

Interviewer

14:57

OK, so with that being said, how do OEMs typically respond to or adapt in order to mitigate the negative effects that port congestion has on their operations and competitiveness?

Participant C15:11

To not.

Want to not.

To to not over promise #1 because you know that like, these things will always happen, it's been they they've happened before and they will happen again for as long as certain things are not fixed. So to just manage expectation where a client is concerned to just say.

By this time and not giving texts that are the exact date to say on the 14th of this month, you would have the vehicle by to to say in the next month or in the next 4 weeks or in the next three weeks you would have this you know. So in that way they know not to make claims or something they are they are not sure they're going to get on time.

Interviewer 15:56
So you would say that the way of managing it is to lower customer expectations?

Participant C16:01
To not to. I don't want to use the word.

Interviewer 16:04
Well, not heightened him, but not create expectations for the customer.

Participant C16:07
Not to create yes, not to create expectation #1 #2 true 'cause. They're like we said, there are certain things that are beyond.

Interviewer 16:17
The control, yeah.

Participant C16:17
Anyone's control? Yes. So on your end, just make sure that communication is on point and the the the customer is also kept on the loop throughout.

Interviewer 16:31
You mentioned external factors or things that we cannot control, and that's my

next point in this discussion. So we did touch on the weather conditions and the impact that it might have, but things like seasonality and unexpected events can also contribute to congestion levels at the port. So my question is, how do you go about?

Participant

C16:49

M.

Interviewer

16:52

Anticipating such things.

Participant

C16:56

Oh.

I think like being like being prepared for like the seasons. We obviously know that the weather's.

Like it changes all the time, and there's also seasons, so you know that in rainy seasons this is what like if you're on top of your game and you know what you're doing and you've done it before, then you are better prepared for each season that comes. So.

I don't know. Like.

Interviewer

17:28

So just in terms of of seasonality, when we talk about seasonality, we refer to the the influx of demand during certain times of the year. So when we know that it's December, people tend to buy more vehicles in December versus. You know January or February or any other time of the year. So that seasonality can be disruptive. How how do you go about?

Participant

C17:49

Mm hmm.

111

Interviewer 17:53
Managing that.

Participant C17:55
I'm planning ahead.

Interviewer 17:56
Oh, how does that let me ask the question? How does that cause congestion levels at the port?

Participant C18:04
I think it's pure.
Pure, pure, pure planning or poor part like poor planning and poor part management because.

Interviewer 18:13
Mm hmm.

Participant C18:15
If we are going to wait until the very last minute to do stuff because we know in December people buy cars and only in December we start ordering or we start, we start trying to ship things into the country, then it will create a problem. So I think if we better manage and you better plan to say because you know in December this is what you guys usually walk around, let's say in in December, we know we sell about 200 then we make sure that.

Interviewer 18:31
Mm hmm.

Participant

C18:42

We plan well ahead of time to make sure that those are here. Before December time.

Interviewer

18:51

OK. And then what strategies or procedures can be implemented to effectively manage or no, we did talk about that, sorry about that.

Participant

C18:59

I'm taking.

Interviewer

19:00

No, my next question is, can you elaborate on any specific challenges that are we have faced when vehicles are delayed at due to port congestion?

Participant

C19:12

I mean one it still like it's an overall negative impact on the industry's competitiveness #2 it's a key, it's it's increased costs and #3 it's I think we end up also losing customers because we are not meeting them at their point of need, you know because I don't think you just wake up one morning and say I'm going to buy a car, you plan well ahead. So you know like you you're you're already excited. So if that is not met then it's very disappointing. So we may end up losing.

Interviewer

19:38

M.

Participant

C19:45

People to other.
Brands, if we are not on point with our stuff.

Interviewer 19:53
And and with that being said, I mean that ultimately affects your competitiveness.
How about the relationship with your stakeholders and internal relationships?

Participant C19:58
Yes it does.

Interviewer 20:15
Mm hmm.

Participant C20:15
You point to my fingers as to who didn't do what, who didn't, umm, plan properly
and stuff like that. So I think also with it internally also they would it would create
problems because obviously there's different teams that work on different things.
So if one team is deleted, if one team is deleted though like the whole company
will suffer.

Interviewer 20:41
OK, so there's definitely a ripple effect.

Participant C20:44
Yes.

Interviewer 20:45
OK. Well, that concludes our discussion. Thanks once again for your time and your

valuable insights. Your input will be greatly contributing to the understanding of poor challenges within South Africa. If you do have any further comments or thoughts that you would like to share with me, please feel free to do so now.

Participant

C21:05

I know I'm good. Thank you.

Interviewer

21:07

OK. In that case, our interview is concluded and I will stop recording and thank you once again for your participation.

Participant

C21:16

Thank you so much.



Interviewer stopped transcription

Invitation to participate in a Research Project- 20240823_140539-Meeting Recording

August 23, 2024, 12:05PM

28m 55s



Interviewer started transcription

Participant

E0:14

OK.

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Interviewer 0:31
Is usually.
Important and pivotal to the economic growth and how we drive our economy in South Africa. So my question to you is how would you describe the current state of port infrastructure systems in South African ports?

Participant E0:49
This question is to me right.
I'm not so clued up with regards to the port infrastructure. I'm not.
Necessarily working in in that area, but I may know of.
The only thing I may know of is the delays that tend to happen at the port and so forth, so the structure itself from A-Z.

Interviewer 1:13
OK.

Participant E1:17
Is one that I'm not really.

Interviewer 1:20
Familiar with.

Participant E1:21
Familiar with.

Interviewer 1:23
Look irrespective. Talk to me about. About what you understand by those

challenges and the delays. What do you what did you see and what do you think is the main cause or the driving factor behind those delays?

Participant E1:36

Well, in my opinion or the experience that I've had with those delays, have everything have been to do with sometimes the natural disasters, for instance. So if I'm expecting a shipment that is coming from the US on a vessel on a ship. To South Africa, obviously it has to go through the different entry gates and somewhere in between, if there's a Hurricane Katrina. In between.

Interviewer

2:09

Yes.

Participant

E2:09

There is bound to impact my my shipment. We're looking at the risks like damages. We're we're looking at delays on turn around times. Something in those lines.

Interviewer

2:29

OK. And do you think to some extent having efficient rate roll road and rail structure having efficient port structures has a role to play in, in, in, in? In these kind of challenges or congestion challenges?

Participant

E2:49

Oh, I think if we had better Rd infrastructures in South Africa that would lessen the dependence on on the port, for sure. Not everything will have to then be coming on the by water then we can, if we have reliable, I think maybe we also have railway systems, but obviously in South Africa they aren't as advanced as the UK, Europe and all of those. So it's it's nothing in comparison.

Interviewer

3:03

Hmm.

Participant E3:18

But if we were to come on par with all the other.

Continents, I suppose then that would lessen our.

Dependence on on on the port itself. So we have a different delivery systems to get our product across, be it Rd, be it rail, even air, air, I suppose.

Interviewer 3:35

OK.

Mm hmm yes.

Participant E3:46

Although there is obviously there is obviously a limitation to.

The the weight and cargo in the air. But you know.

The I'm I'm all for a better there. There could be improvement for sure.

Interviewer 4:02

OK. And with that being said, let's talk a little bit about strategies and we know that strategies are usually used to either mitigate to either.

Participant E4:07

Mm hmm.

Interviewer 4:13

Avoid a situation to combat a current issue and also it's used to to structure

yourself so that you're always prepared what strategies or measures can be applied to improve operational productivity and competitiveness imports.

Participant E4:17

Mm hmm.

Mm hmm.

OK. So strategies, when you say strategies, my first thought comes to.

Interviewer 4:35

Mm hmm.

Participant E4:36

The people that are obviously in the position of making those strategic decisions and improvement and so forth. So my feedback is more in line with what those people bring to the party because they are the ones that the wine makers and they bring their strategies. So better focusing I suppose.

Interviewer 4:45

Mm hmm.

Participant E5:01

And and and also trying to mitigate like you can anticipate a risk.

Interviewer 5:08

Hmm.

Participant E5:08

I suppose.

I I find that sometimes it does happened that a lack of forecasting and taking into consideration certain risks.
Which could be a proactive approach. We end up having then.

Interviewer 5:25

Hmm.

Participant E5:28

Those kind of delays and disasters because somebody.
Who is supposed to be strategizing?

Interviewer 5:32

Mm.

Participant E5:35

And taking into consideration all this risks didn't.
So strategies are very important, but it requires a lot of zoning in and.

Interviewer 5:40

And and.

I I.

Participant E5:48

You anticipating risks that have not happened but might happen?

Interviewer 5:54

I like your. I like your point that you make it. It's about anticipating. And I just want to talk more about that point that you made. Do do. Would you say that

the port is not anticipating? And this is the reason why we have all these setbacks.

Participant E6:11

I could say yes, that's one. But although I also want to add to that that so going back to the example that I gave of natural disasters, you can anticipate them, but you you can never be too prepared for it. You get what I mean, whether it'll come years, whether it'll come in a form of a volcano or hurricane, but also having sometimes unfortunately, you'd have to be in that situation.

Interviewer 6:14

Mm hmm.

That's very true. We are Mother Nature doesn't. Yeah.

Participant E6:41

Be for the first time.

Or not to to having lend those lessons. Having suffered those losses, then you come out obviously very scared. But that is a lesson for the next time you do your planning, you know? But nobody negotiates with Mother Nature. But I absolutely think that.

Interviewer 6:58

Absolutely.

Participant E7:04

Now you are in a position of knowing what is familiar, what could happen out there, so maybe also.

Depending on whatever you are moving through the port, do you do it seasonally? Is that disaster coming in at a certain season? Can you avoid it and try to then move your date? You know, I'm not sure if it's something that needs

to be taken in that can be taken into consideration, but for sure the the there could be an improvement when it comes to the risks I suppose.

Interviewer 7:37

Mm.

Participant E7:45

You are lucky if, for instance, the only thing at the end of the day that you've suffered are just delays, but the the product itself and everything is still intact and you can still profit from it.

Interviewer 7:46

Yes.

That's very true, because oftentimes sometimes Mother Nature damages products, and you find that you end up suffering bigger losses than than anticipated. Well, with that being said, are there any specific initiatives or best practises that you believe have been effective in addressing port congestion?

Participant E8:07

Hey for sure.

For sure.

Not that I, and not that I know of. The thing is with the like I said, I'm not really so much familiar, but.

Interviewer 8:34

Hmm.

Participant E8:35

I am starting to zone in and I'm asking questions and then questions because as

someone in my line of work, I have the the language from the port in the systems that I need to start understanding and I'm asking questions. What does it mean when it's entry port, exit port?

Interviewer 8:41

Hmm.

Participant E8:56

For one, I feel like there's just too many entries and exits.

Interviewer 8:56

Yes.

Participant E9:01

Maybe I'm. I'm just I, maybe I am going in from a very shallow perspective because like I said, I'm not so clued up on it, but.

Interviewer 9:02

Talk more about that Indian exits.

Participant E9:14

The vehicle itself. Sorry, not the vehicle. The, the, the vessel.

Interviewer 9:20

Hmm.

Participant E9:21

That is carrying the product on the water and so forth moves through a different

gate, so when it leaves, it's like it's like having, you know, customs when you are shipping something from from overseas, then it goes through that customs and that customs. But now in this instance at the port, it's as if it's like those custom gates multiplied.

Interviewer 9:31

Yeah.

Yes, and and to what extent do you think digitalization could, could have a a positive impact in that in that particular area that you're talking about? 'cause, you said there's multiple gates and you feel like there's just too many. So do you think digitalisation could be a tool?

Participant E9:45

You.

Did you digitilization? Could be a tool for sure, and I'm probably I'm certain it's a tool that already exists, but it could be improved because I've seen on our systems you can actually track.

Interviewer 10:12

Mm hmm.

Participant E10:16

You can actually track a product or the vessel while it's moving through the different ports. However, what I I I know is that it's it's it's it's a digital intervention that is that it's digital systems that still require human intervention for sure. And wherever there is a human.

Interviewer 10:24

Hmm.

Participant E 10:39

Intervention that's bound to be errors. So I've seen that despite in spite of the digital.

Systems being in place.

That sometimes.

A vessel would have passed through a certain gate, let's call it gate one.

However, on the system it's still showing that it's not past gate one.

Interviewer 10:57

Mm.

Because somebody didn't fix it on their side.

Participant E 11:06

'Cause somebody didn't hear it because maybe somebody sits there with a scanner or something and they, or maybe they had a system issue and thought, well, you know what we're gonna do it manually and come back to it later. But if somebody doesn't go back receive, that's what I mean. It requires a still human intervention. If somebody doesn't go back and fix it, then we are going to have.

Interviewer 11:11

Yeah, yeah.

Human.

Participant E 11:31

Interruption on on on the feedback and the and the data.

Interviewer 11:37

Yeah.

Hello, can you hear me?

125

Participant E 11:42

Yes, I can hear you.

Interviewer 11:44

Sorry, my signal just dropped a bit. Do bear with me. I'm busy driving. Actually, I'm not driving and doing this, but I'm being driven. Sorry.

Participant E 11:47

Hmm.

OK.

Interviewer 11:54

OK. Thank you for that insight. So let's talk about port operations. Let's talk about that and and and understand how the operations are, what are they doing on their side to balance and and obviously manage port congestion. So my question to you on this particular area is, can you describe how port operators manage the balance between demand and supply? Especially at the gates.

Participant E 12:24

That's a tough one.

Interviewer 12:26

Well, look, I mean, I think you, you, you, you did touch on the fact that there's too many gates. So just from your perspective, you know what, what do you think do you think that demand and supply is being managed correctly or do you think it's being imbalanced and it's causing the ports to become congested?

Participant E 12:44

I wouldn't really look at it as a managing demand and supply.
From my perspective, I think they are meeting the demand and the supply,
although there could be a better delivery, I think it's more the the delivery if you
work on improving the delivery. Therefore the demand then.

Interviewer 12:58

Mm hmm.

Participant E 13:10

The demand gets gets met.

Interviewer 13:14

Hmm.

Participant E 13:14

On time.

Interviewer 13:16

OK and.

Participant E 13:17

So the when I'm talking about the the delivery is what we've touched on such as
managing the, the the port, maybe trying to minimise the different entries, the
number of entries and the number of scans.
And so forth. I think that lessens the the timelines.

Interviewer 13:33

And.

OK.

Participant E 13:41

At the other end of of this is.

Perhaps a customer or?

Myself, that's waiting for that product. So if you could get it to me in quicker.

Interviewer 13:50

Hmm.

Participant E 13:57

That would well, that will be great because it helps me meet my delivery on time. What we we often talk about on the on the port system, we never have necessarily an estimate a, a definite estimated time of arrival and I wish we could have that because with some systems or maybe if you were to Korea your product right with.

Interviewer 14:14

Mm hmm.

Yeah.

Participant E 14:22

This road companies Courier companies, you can track it and for sure there's a specific date that it says you would have received it by then, but unfortunately on the vessel we're talking we.

This it's estimated, but almost an assumption, meaning that I think.

Interviewer 14:40

It's like a calculated guesstimation, but they call it guesstimation.

Participant E 14:42

It's a calculated guesstimation and also it's quite the the delivery date will obviously be an exaggerated date that that, that that accounts for all the mishaps and delays in between.

Interviewer 15:02

Hmm, that's very true. I think that happens quite often, and what challenges do port operators typically face in this regard, and how do they overcome them?

Participant E 15:14

Well, I would imagine that.

It's operational having to give suppose feedback and manage expectations.

Interviewer 15:27

Yes.

Participant E 15:28

To to the people that are expecting.

One the vessel. Imagine it being taken by the tsunami or the Katrina and people are demanding answers from you and you don't. You're not getting any answers.

Interviewer 15:43

Huh.

Participant E 15:43

So just that is an example, but I I can imagine that those people will be faced with a lot of reporting, a lot of investigations, a lot of feedback that they need to give.

A lot of pressure. So if if though the the the system's in place, let's say on a perfect day when there aren't any interruptions and everything is going in smoothly.

Interviewer 16:01

OK.

Participant E 16:13

The people at the port, the only thing they'll probably will face our operational day-to-day.

Delays.

But it's only in extreme cases that they they need to really sort of be in the line of fire and take some sort of accountability responsibility.

In in, in giving and managing the customer's expectations.

Interviewer 16:43

OK. And now you talked about customers and managing expectations and you know the extreme cases, let's talk about competitiveness because all these factors have some role to play in the competitiveness of your business. So my question to you is, what are the primary impacts of port congestion on OEMs and OEMs being original equipment manufacturers like a BMW or BW for example?

Participant E 17:09

Mm hmm. OK, can you repeat that question for me again?

Interviewer 17:13

So what are the primary impacts? What are the? What are the sore points? Where does it hit, when, when? When these port congestion issues arise? Where does it hurt most when it hits?

Participant E 17:24

Targets targets.

Interviewer 17:24

Let me put it that way. OK. Targets. Uh huh?

Participant E 17:27

And targets and of course the the customer dissatisfaction is always a sore thump when when there has been a commitment to a date and it obviously doesn't happen in that way, although not everything that is anticipated will eventually go as scheduled. However, if they are, there are systems in place and there's feedback in place and you can manage your clients.

Interviewer 17:36

Mm hmm.

Hmm.

Participant E 17:55

That is a bit of a relief for the OEMs, but naturally, if those disasters aren't ones that could be improved in time, the OEM itself will still, let's say for example, so O OEMs, obviously in order to compete, they have to reach certain targets on a monthly basis. So right there, if we are within the storm of the disaster and it's impacting us right now in the month of August.

Interviewer 17:59

Hmm.

Yes.

Participant E18:27

So the anticipated target will not be reached by the end of the month and if those disasters keep happening for, say, the in 1/4 in the next three months or so, then it means I would have not met a target for the next three months, which will now start to impact the OEM negatively financially as well. Because if you are not, that's.

Interviewer 18:49

Hmm.

Mm hmm.

Participant E18:57

If you are not selling your product and you are not delivering to a client and you are not meeting your obligation, you are not getting paid for it and over time meeting targets obviously has positives. Like you see a target.

Interviewer 19:06

Hmm. Hmm. Hmm.

Participant E19:13

An OEM doing so well when they do well, they incentivize they, they they give bonuses and all of those. So obviously to an OEM not reaching target or KPI means that you you are in the negative and it starts affecting.

Interviewer 19:26

Mm hmm.

Participant E19:33

Everything in the company.

Interviewer 19:34

Yeah.

And and what about?

Participant E19:37

You might even start cutting down on cost. Whatever you know depends on obviously the the the size of the OEM itself. There's OEMs that are so big they can survive little something like this is yes, this size matters, something like this is like water under the bridge for them and there's OEMs that can close doors because of something like that.

Interviewer 19:40

Mm hmm.

Yeah.

Absolutely.

But as they say.

Size matters, eh?

Yeah.

Absolutely. And. And what about the customer, the end user?

I mean, they obviously affected.

Participant E20:10

You mean the impact on them?

133

Interviewer 20:13

Yes.

Participant E20:14

For sure. So the impact is very huge.

Where you find that the customer might even lose interest.

Interviewer 20:24

Mm hmm.

Participant E20:24

The customer might change their mind. Not every customer is as understanding. It puts a lot of pressure now on the OEM to try to reassure the customer. But you can only do it, obviously within limits. You know, if I'm assuring you ma'am, it's coming, don't cancel.

Interviewer 20:42

Hmm.

Participant E20:43

And then can, let's postpone it to this date. We anticipate that'll come On this date and by this date it's there.

You have done a good job in assuring your customer the impact there would be that.

The expectation wasn't met, but obviously you would have turned the customer around.

Interviewer 21:03

Hmm.

Participant E21:03

With, with with you keeping them up to date, but the goal is to not allow them to cancel or cut the deal, but also in extreme circumstances where situations aren't managed as they should. Customer really does lose.

They lose interest and they the biggest impact is a client, a customer jumping to a competitor.

Interviewer 21:24

Mm hmm.

Hmm.

Participant E21:32

Because I didn't get my my demands met at OEM number one. So therefore after so many promises and my expectations not being met.

Interviewer 21:32

No.

Participant E21:48

I'm going to now give OEM #2A chance. So we always at the risk of our clients jumping ship to the competitor.

Interviewer 22:00

OK. And then in terms, OK, we, we spoke a lot about external factors such as the weather that affects the, you know things that we can't control.

What about unexpected events like we see now there's a lot of unrest across the globe. How does that, you know, what does that do for port levels? You know, the congestion levels at port.

Participant E22:16

Hmm.

It does. I'm sure I just gave one example of the a natural disasters, but the other other?

Things that could delay those unrest, the political sphere, obviously, and also another thing that is the economic, I don't know if it's it's applied at the ports, but I found that even the the interest rates or.

The the charges currently on the customs itself, the exchange at the ports, it's quite it's it's it's so costly that it becomes.

Impossible to even afford to ship something to move something across the border or across the globe. So definitely those factors are just as impactful.

Interviewer 23:22

And and what strategies or procedures are in place to to manage such things, you know, especially with the political and you know, the the global unrest, do you think that the port has any strategies to minimise the impact to them?

Participant E23:38

I doubt it because for for any unrest that happens there, the ports are obviously structured and I'm sure they go by anything that the financial sector says. So Fest of September, this is going to take place and unfortunately this is what the port needs to put into place. So they can try to mitigate risks on their own, but unfortunately there are laws legal.

Obligations that.

If a if South Africa decides in Parliament that this is the new, the new laws, whatever the legal terminologies are how they operate, if legally.

That is changed.

Interviewer 24:28

Hmm.

Participant E24:28

In in Parliament, it impacts them, but what? What do they have to do? They just follow through with the new laws.

Interviewer 24:36

Absolutely. And we find that often does affect a lot of businesses. OK, so just.

Participant E24:40

For sure you can contest it. It is what it is. If the bill is passed, it's passed.

Interviewer 24:44

It's true.

Absolutely. And. And then just a bit more of you've actually given quite a lot of depth in terms of challenges that that you know possible up upcoming challenges. So I think my last question to you is how does port congestion ultimately affect the OEMs competitive in the automotive market space? And let's talk about it from an internal relationships perspective, looking at your stakeholders and those relationships?

Participant E25:15

It it it does impact obviously all the OEMs separately, but if you look at all the OEMs collectively, all of them were to be impacted by that, I think that. You know all of them? Sapphire blue. All of them are at risk of of of losing their their end user. All of them. But I've, I've. I don't know if something like this exists.

Interviewer 25:35

Mm hmm.

Participant E25:47

In the ports or in in in the sub-saharan areas, but I find that sometimes the OEMs in the much larger like European countries, they function better because what happens is that they are almost there is almost an amalgamation. They are united whereas this OEM, even though I am an A competitor with this company. But I can when when it comes to issues that are facing us in the more to underst in the in the motor industry.

Interviewer 26:07

Hmm.

Participant E26:18

We can collectively shake hands and and.

Interviewer 26:21

Mm hmm.

Participant E26:23

And from a union to to combat something.

Interviewer 26:24

It's fine. Let's see again.

Hmm.

Participant E26:28

They I find that the European countries do that a lot.

For for example, you'll find that on the the hybrid systems and the electric cars are something new in South Africa, but they're up and running in the European sector. But OEMs will come together. You have different companies saying, hey, how about we club in together and build this.

Interviewer 26:40

Hmm.

Participant E26:52

Charging points for electric vehicles. So if you were to travel in between from Germany to Italy or or Greece or wherever in between the stops, you have the charging points for those vehicles. It wasn't built by the government, but it was collectively decided upon by the OEM. So I feel like bringing it back to our ports to our sub-saharan areas, if we were to.

Interviewer 27:19

Hmm.

Participant E27:23

Sometimes you know, competition aside.

Interviewer 27:26

Mm hmm.

Participant E27:27

Perhaps the OEMs, if they are impacted and they're the ones that are suffering a

loss, they are the ones together can stand against a certain bill like we were saying, the political and whatever decisions are decided in Parliament. But if powerful oams stand together, they are the ones that can contest it because.

Interviewer 27:33

Hmm.

Yeah.

Participant E27:49

Somebody like the president or the Minister? Probably.

Missed something in the data and they make it. They made a decision that isn't in favour of the OEMs. So I feel like together as a different OEMs as much as their competitors, they have common ground somewhere. That is where they need to hold hands. And some Tammy's stand together and oppose. And if there are better systems and better laws to be implemented on the ports.

Interviewer 28:07

Hmm.

Participant E28:25

The they are the ones. They are the ones that need to stand forth and and push this.

Interviewer 28:30

Yeah.

Participant E28:30

So that they are implemented because they they are the ones that suffer the the losses.

Interviewer 28:37

Well, you're the second person to say that today. And thank you for that. That's a very, very, very insightful interview.

I just want to say thank you for agreeing to participate. I'm gonna stop recording now.

So that we can say names.



Interviewer stopped transcription

Invitation to participate in Research Study- 20240822_130016-Meeting Recording

August 22, 2024, 11:00AM

33m 15s



Interviewer started transcription

Interviewer 0:34

So under port infrastructure, my first question to you.

Is that how would you describe the current state of port infrastructure system in South African ports?

Participant A 0:47

OK. I think I'll just describe it as the infrastructure at the port which.

Is obviously the subject of today is that it's not so adequate. It's not up to par because of all the delays that we as a company have been experiencing. So we think that if also the government can intervene in the infrastructure that it's not up to the level that we'd also like, so that all the delays that are.

The part can just minimise them, so I'll also define it as.
This infrastructure is inadequate at the moment.

Interviewer 1:29

So you believe it's inadequate and with that being said, what current issues or other issues related to infrastructure do you think add pressure? Is there like Rd issues, rail issues?

Participant A 1:31

Yes.

Some of them Rd issues because if those if the infrastructure, like I said it's very inadequate not up to par and everything is not rigid it causes some type of delays in also transporting.

All of our vehicles, so in in that in between those delays are causing us to actually have extra consequences that we deal with on a daily basis.

So yeah, to answer your question.

Interviewer 2:17

OK, I like the fact that you said you have extra consequences to deal with based on this inadequacy of the infrastructure. Can you elaborate more on those consequences for me?

Participant A 2:27

OK, those consequences that I've meant that I'm about to mention would be very unpleasant. So meaning the delivery time is also.

Affected, meaning that obviously in even our customers, the dealers that we deal with, they need specific timeframes for the delivery of vehicles. So all those consequences.

Interviewer 2:39

Mm hmm.

Participant A 2:51

They actually because a delay in all the structure of all the logistics that needs to take place for these vehicles to these vehicles to be appended to our customers. And if they are not appeased with the just in time of the deliver of the vehicles, they will be forced to move to another supplier. So those are the consequences that we might face if this is not resolved, maybe urgently or if we work towards resolving them.

Interviewer 3:11

Hmm.

OK, so in that case, how does the quality of the port infrastructure contribute to or worsen port congestion issues?

Participant A 3:32

In contribution.

I think if maybe the delays are are, are, are communicated then we can be able to hinder them or actually work on them just on the spot.

So those that's maybe the positive side of of it, if there is a delay, there's that communication to say, look there is a delay in maybe a pod vessel or any congestion that might happen at the port, then we're able to deal with it and maybe apply some problem solving techniques that we may actually.

Interviewer 3:59

Mm hmm.

Participant A 4:06

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Solve it quicker, but the contribution that is also affecting negatively is that us as a, as us, as a, as a supplier, we are unable to fulfil some of the promises that we have made to our other sub suppliers and dealers. So that is hindering our progress. It's hindering the quality of our work because everything is delayed and we're communicating delays. So obviously our suppliers are also going to going to.

Interviewer 4:11

Mm hmm.

Mm hmm.

Participant A4:38

Be hesitant to deal with us in future, so having those type of unpleasant. Delays. It's also causing our suppliers to be not so sure about the quality of the work that we are going to produce because of the delays we've communicated and maybe even if it's not a once off thing, it's always happening then that means we have a bigger problem that we need to face.

Interviewer 5:03

Hmm.

So in other words, there is definitely an impact to your performance and your your your competitiveness.

Participant A5:12

100% yes.

Interviewer 5:14

OK, so with that being said, now that we've discussed infrastructure, let's talk a bit more about port strategies, OK, because in this discussion you've mentioned, you've highlighted the government intervention is necessary. You've also

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highlighted that there's a lot of consequences and positive and negative impacts with this port infrastructure.

In terms of strategies, what strategies or measures can be applied to improve operational productivity and competitiveness imports?

Participant A5:45

OK, I'll think when I've mentioned the government playing a role, it also alleviates some of these congestion that we talk about because from the infrastructure we're using rail, we're using Rd transport. So or if that can be intervened with the Minister of our road and trust and traffic department, then we can be able to sort those issues out, which they can.

Interviewer 5:51

Mm hmm.

Participant A6:15

Work on an infrastructure project.

But those post congestions can be alleviated.

Interviewer 6:24

And to what extent would you say that digital intervention?

And competitive strategies could play a role in in helping to improve operational productivity.

Participant A6:36

Can you please repeat that? I didn't get that.

Interviewer 6:38

So, to what extent do you think digital interventions and competitive strategies can alleviate or improve operational productivity in the ports?

Participant A6:47

I think with, obviously our world is moving digitally, so I think.

Interviewer 6:52

Mm hmm.

Participant A6:55

Some of the interventions on the digital space and the IT space, we can maybe formalise or get some ideas, especially from now that we're moving to an in an industrial.

Community. So maybe those type of it advancement would actually help alleviate some of the congestion that may happen at the port.

Interviewer 7:15

Mm hmm.

Participant A7:20

I'm not sure what they have right now installed.

Interviewer 7:25

M.

Participant A7:25

To actually get time frames of deliveries and all those consequences of that are

causing the port congestion. So maybe if there's new systems in place then we can be able to move a bit faster with these port congestions.

Interviewer 7:43

OK. And with that being said, are there any specific initiatives or best practises that you believe have been effective in addressing port congestion challenges?

Participant A7:55

At the moment, at the moment I'm not quite sure vividly of all the. Digitalization that is happening at the port, but I must say with since we are using a smartphone, everything is going smart.

Interviewer 8:13

Uh huh.

Participant A8:14

I think that innovation would actually help with some of the potential that they may face at the port so.

Interviewer 8:22

Hmm.

Participant A8:23

Some of the systems, maybe we can change or be upgraded into elevating some of these and maybe some of the business environments that are surrounding the port and all the supply chain actors that can be. Called in or lured in to maybe take part into a new innovation, so maybe that will help.

Interviewer 8:46

OK. That's very interesting perspective. I just want to talk a little bit more about the business environments surrounding the port. What do you believe they can do differently or to assist in this challenge?

Participant A9:00

With this challenge, I think it we we also believe that it's a work in progress. It's not something that we work overnight. You know it's still there's still so many things that we obviously all the departments to sit down and actually try and resolve these issues hence of this research. So I think maybe some of the business.

Interviewer 9:06

Mm hmm.

It, yeah.

Participant A9:23

Actors.

Interviewer 9:24

M.

Participant A9:26

We can also implement some of the things that are very in core management, the emphasis of inefficient operations of these resources, maybe that they use at the port, so maybe some of those things can be looked into and then maybe disagree to agree to change just a few things and maybe also the facilities that they use, maybe this is causing the delays. So yeah, those maybe the things that I can say at the top of my head just.

Interviewer 9:39

Hmm.

Participant A9:56

To look into.

Interviewer 9:58

OK. So thank you for that and.

Participant A10:07

OK.

Interviewer 10:08

The question to you is, can you describe how port operators manage the balance between demand and supply aspects of the gate services to ease the congestion at the port?

Participant A10:19

OK.

So the demand and the supply chain from what we have witnessed in real time. They they they somehow to have a strategy in place, but somewhere, somehow the cost of the delays. I I I'm just not sure how those proposed systems that they have that will cause.

Interviewer 10:34

Mm hmm.

Participant A 10:45

For them to be up and running with the demand, but.

I think with the operational issues with the operational structure, they seem to be very power when it comes to the demand of all the congestions and all the demands that we have as a company of the vehicles that are there at the vessels. So I think with them that structure is working perfectly but with some of the delays that they 'cause, they just don't know how to solve those problems. So that's where we're looking to to make those researches.

To come back to them and said OK.

The in our demand and supply, we've noticed 123. So if maybe in the operational structure they can have maybe monthly meetings to talk about all these congestions, then maybe they can see where they are and then try to resolve those issues. But with the demand and supply, it just moves swiftly.

Interviewer 11:44

OK, so to what extent does seasonality or weather conditions have an impact on that balance between demand and supply?

Participant A 11:44

Yes.

I think.

Seasonalities they they do have a system in place. I mean, as I've seen as well, I think they do have a, a, a system in place where as they are aware of the seasonal changes and there's someone who's actually working there and who's knowing the ships and all this is not impacts that may impact them with the supply chain and the supply chain and the demand.

So I think with that they are up to power.

Interviewer 12:26

OK. And with Mother Nature, the weather conditions, 'cause, that's always tricky to control.

Participant A 12:29

What?

It is always tricky, but I think with the system in place and all the employees who are trained to be working with in such weather conditions to know that, OK, we are expecting maybe this percentage of rain or we are expecting this expected of high levels of.

Seasonal change, whether it's summer, whether it's winter, I think getting somebody who's very.

I'm skilled in that field, may help to alleviate some of the delays that may happen due to seasonal changes.

Interviewer 13:09

Noted. And then what challenges do port operators typically face in this regard, and how do they go about overcoming them? So we've spoken about the fact that they do have some kind of a system to manage the seasonality weather conditions. But you know what are the challenges do they face other than this and how do they go about overcoming them?

Participant A 13:32

I would say that port managers this is their role to make sure that their team is ready for anything and everything. Maybe the skills and the training that they have received as well.

To try and work with such a problem that they face. So I think with all the vessels and all the ships on everything that is happening at the port, they asked you to do to be trained to deal with some of the seasonal changes that may occur so.

Obviously there are delays due to this, but I think they handled them very well and it also depends on the team as well how the team is in all situations, how

they deal with this proposed system that they have in place. So I think right now it's just a matter of tweaking a little bit of rules here and there to see how best they can work with such a problems that they face.

Interviewer 14:34

OK. So just to just to bring it back to altogether, we've had a discussion now on the infrastructure challenges. We've also spoken about strategies and Operation, port operation effectiveness. So with that being said, it's very important to look at how it affects you in a competitive space. So my next question to you is what are the primary impacts of port congestion on your original manufacturer, equipment players or your OEMs as we call them?

Participant A15:05

Please repeat that.

Interviewer 15:06

So what are your primary impacts of port congestion? How does port congestion impact OEMs because they are also customers?
To the port. How does the? How does the port congestion impact them?

Participant A15:23

It impacts them in a way that obviously the business side of things.

Interviewer 15:29

Hmm.

Participant A15:30

It doesn't. It's not lucrative. And also we work with a the South African motor in

automotive industry. So with such with such research also. So all of the part congestions they affect negatively into the business.

Interviewer 15:37

Hmm.

Participant A15:50

Meaning we we can't even sell our business to elsewhere.

We can't even expand to other countries because of some of the alleviations of the problems that we face at the port. So I think it it does.

Interviewer 15:55

Hmm.

Participant A16:06

Somehow give a negative image and also the the. What's this? Actually I'm losing a train of thought, so some of our our procedures, you know that we have in place, they don't look up to power. So we can't even expand our businesses.

Elsewhere around the continent or around the country, because of some of the the problems that we face at the port.

Interviewer 16:33

That's very interesting. And from just to to to add on that, do OEMs lose out on customer sales? Is there impact on that on that side of the business?

Participant A16:44

Do lose out on customer service because of also the the delivery time and sometimes we need to do.

Inspection on this vehicle, so if these are delays, we don't have enough time to do inspections by the time it gets to the customers, they our vehicles have problems then they need to come back. So obviously the customer won't be satisfied. So we lose some what some of the sales or some of yes.

Interviewer 17:09

That's it.

That's that's very interesting point. So there's definitely an impact to the end user. And in terms of of of, of a case like that where a customer decides I'm not taking the car anymore or they've changed now to another supply because you mentioned earlier that sometimes when you have delays, it results in people going to look for other suppliers. So in a situation like that.

Participant A17:12

Yes.

True.

Interviewer 17:34

You know, how does vehicles being stuck in bond for longer periods affect the business?

Participant A17:40

It affects the business in a very negative way. 'cause as we collect data and to see on the past few months how we have worked and everything is congested still at the port it becomes a frustration to the dealers and the dealers work with the customers face to face so that that impact it, our processes are tarnished because now we need to go back to the drawing board on how well we can deliver this specific one vehicle because if the potty has got 50 cars and they're stuck there.

Interviewer 18:03

Mm hmm.

Participant A 18:12

It gives us anxiety because now we don't know whether to move forward with the deal or to reject on the deal or to still deliver the vehicle like that. And we're not sure that we're delivering our quality vehicle or a quality service so that it withdraws a lot on the end user from the supplier to. So the whole supply chain is just tarnished.

Interviewer 18:18

Hmm.

You know, that's very interesting that you mentioned the processes are tarnished because I would assume that your company would have processes in place so that they ensure to live smooth and efficient delivery to the to the end user, so.

That's that's actually very interesting that you've mentioned the tarnishing the tarnishing of the processes, meaning that port congestion actually has a negative effect on what you would call operational on your side. You know, if you look at it compared to.

Participant A 19:02

Yes.

Interviewer 19:06

Your partner, who's supposed to be helping you get these vehicles out to the customers on time. So I know I've said a mouthful, but do you believe that through port congestion it has a negative impact on your processes?

Participant A 19:22

Yes, I do believe in. I'll elaborate on that because even.

Interviewer 19:26

Mm hmm.

Participant A 19:28

All the correspondence and all, all the all the same time that we always try to alleviate these problems, something comes back to bite us so that negatively we need to, as an operational system, go back to the drawing board. What can we do more to to actually assess and actually check.

This congestion, because no matter how much we try to alleviate and communicate delays, there's something that comes back to bite. It's either the dealer or the end user, or ask the supplier or even us as the the, the, the supplier of these vehicles, because if that port congestion.

Interviewer 20:26

Mm.

Participant A 20:26

Spending millions on these vehicles, so we need to look into that also the cost and that comes with the quality that we are we want to produce and to give out.

Interviewer 20:39

OK. No, that's that's very interesting. And how do OEMs typically respond to or adapt to mitigate the negative effects because we spoke a lot about the negative effects of port congestion. How do you go about responding to that or adapting your strategy so that you can remain competitive?

Participant A20:40

Yeah.

OK.

We try to with the O with the OEMs when they come back to us, maybe something that will positive.

Will be that since everything is obviously communicated to the port and us, we try to make sure that everything is delivered on time and when that that we it's either if we even work extra hours just to fit in on all those things that are lacking and try to check our vessels and everything that our those vessels that bring our vehicles, we actually check on them and make an extra big team so that they can check all the structures that.

Need to be.

There and know that this is a a, a characteristic or anything that would eliminate any congestion after the pot because.

Interviewer 21:44

Yeah.

Participant A21:54

The process doesn't stop at the pot.

Interviewer 21:57

Absolutely.

Participant A21:57

I was. That's where the process starts for us, which we are here, behind the desks. We are waiting for the port to say OK, we're releasing this vehicle so as soon as they have delays, we need to cover ourselves. So with the OEMs, when they come in, they try to actually bridge that gap.

Interviewer 22:00

Hmm.

Hmm.

Hmm.

Participant A22:16

So when that bridging of that gap, we try to see if there's any concepts that we can look into these issues so that we can first check the deliveries of these vehicles or whatever situation we are faced with.

Interviewer 22:30

So with that being said, in terms of your relationship with your customers, we still on competitiveness, would you describe me as cooperative or arm's length?

Participant A22:34

Yes.

I would say cooperative because it's quite a number of examples that I can mention, whereas we've had a situation where a vehicle is delayed and needs to come back from a customer and the customer was very understanding and we try to also alleviate the expectations of their customers to say, you know what, make sure that if it's 11 O'clock on delivery time, it's one O'clock on delivery time. And if there's any delays, we try to alleviate.

Interviewer 22:43

OK.

Hmm.

Participant A23:11

And not show the customer that the airport congestions and they are and the

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customer is happy at the end of the day.
So I think cooperativeness.

Interviewer 23:19

OK. No, that's noted. So we've had now quite a good discussion on competitiveness and you know you've mentioned quite a few things that have reputational consequences for the company as well as you know in consequences on your internal processes, what external factors are we going to look at external factors causing port congestion, right? And when we talk about external factors, we talk about things that we can't control. So things like the weather and we spoke briefly on.

Seasonality.

When these wars, or Donald Trump, has decided that he's not going to get shot and there's some kind of difference between Donald Trump and the Ukraine, so how do those issues so weather conditions, seasonality and unexpected events contribute to the variations in congestion levels at the port gates?

Participant A24:14

It contributes.

Very negatively, I must say, with some of the the delays that we we we have experienced in the part in the past but.

With all these external factors, when we are, when I say may we go back to the drawing board, these are the factors that I speak about because when we look into these factors, when we know and are prepared and the team is prepared or.

Interviewer 24:41

Hmm.

Participant A24:44

Even at the port, they are also prepared of some of these external factors. We

are able to come back together to say, OK guys, if this is in a case of seasonal issues, how about we get skilled people to deal with this and that so that we know that all the delays and the custom delays are actually limited. We are not saying we are alleviating them completely because we are, it's external factors. I mean we we we can't deal with that at the moment but.

As long as we are prepared.

I think I think if you have a system in place then we can try and lessen them, not alleviate them completely, but to lessen them and by lessening them. Then we know that this is how we dealt with it in the past and moving forward. Here's a strategic issue that we can, I mean strategic.

Interviewer 25:18

Hmm.

Participant A25:40

Possible solution that we can use. So yeah, I think to answer your question.

Interviewer 25:47

OK. No, that's a good, very good in depth insight. But I just want to touch on, on on one thing because I, I do believe I need to bring this up political factors and political unrest because we do know that we are in a time where there's quite a few issues, not only within South Africa, but globally. I mean, to what extent does that have a role to play in the congestion levels?

Participant A26:14

When it comes to political unrest, it becomes a difficult one because you can't. You can't. You can't prepare much on that because anything can happen, you know.

Interviewer 26:21

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Hmm.

Hmm.

Participant A26:29

The only way that we can rely on is just communication. Communication are breakdowns that we know that OK, if there is, then we have to stop the transportation of vehicles because it might give us a negative impact later. If we force if we force strategy to say no, this must be delivered on time, whatever, but.

Interviewer 26:45

Hmm.

Participant A26:52

For us to draw back and stay put until this is resolved, then we can be able to move forward, but it does give us a huge, huge, huge delays in in our operational issues on all departments. I mean if it's an underst across the country, I mean none of everything is working, even us, even other departments. Outside the automotive industry, it's not just us, because we also rely on other supply chains that we come across because we it's not just the automotive industry that's working in the country. So you can imagine all those delays that we might get from the port congestion and also here to us to give us to the to the suppliers and customers. But if everybody's informed then maybe we we can try to say you know what if this.

Interviewer 27:19

Hmm.

Participant A27:45

Unrest or whatever situation we're in.

Now that we we are sure our customers that definitely definite because if they are informed then it's also known you to them that OK, this is happening. So at least as soon as everything our tax in a row then we can just move forward go go back to to to our strategies that we use when we're delivering vehicles or when we're receiving from the port.

Interviewer 28:13

OK. So obviously you're an expert in the in, in your field. I have one question to ask you and you you may freely answer this question.

What strategies or procedures do you believe can be implemented effectively to manage external factors and minimise the impact?

Participant A28:33

I would say because with logistics we use different kinds of.

Transporting of goods or transporting of all the vessels, maybe moving into a different type of transportation.

Interviewer 28:49

Yes.

Participant A28:50

Whether it's flight so maybe I would or would suggest that if there is external factors then we can introduce some of the transportational means that we can use from the port. We are not leaving out the port, but that would assist in case in cases of external factors. I think that for me.

I would give it a try.

Interviewer 29:13

OK, so you actually tying back to what you said earlier with the intervention

from government in terms of infrastructure. So you believe infrastructure is the way having options.

Participant A29:18

Yes, yes.

Yes, having options, yes.

Interviewer 29:25

OK, right. So thank you for that discussion. I'm just going to ask you two other general questions and we can conclude. So my my, my third general question to you is, can you elaborate on any specific challenges faced by OEMs when vehicles are delayed at port due to congestion?

Participant A29:47

I'll elaborate in terms of.

I think our biggest one when we are in in the Fleet Department, in the logistics industry would be.

Satisfying our customer, I think.

Interviewer 30:01

Mm hmm.

Participant A30:04

In this in spaces where as these vehicles that we are transporting cost millions, you know when the customer works out here with their key in their hand for us it's fulfilling to know that we have done our job.

Interviewer 30:14

Mm.

Yeah.

Participant A30:31

We take the so we take the backlash. So in elaborating or one of those examples for us and the OEMs, those are the kind of examples that we look forward to because as long as the end user is satisfied with that product, then we know that when we go back to the drawing board, we know that OK, we are going to change what AP and C or XY and Z so. So there are those, some of the examples that I can elaborate on.

Interviewer 30:46

Hmm.

That.

Well, you know, I think you've really given me so much to chew on.

In terms of your insights, I actually I think you've answered the the last question as well in in your in providing your answers. But I just want to say again thank you for your valuable insights, your time as well your input is greatly contributing to the study. If you have any further comments or thoughts that you'd like to share with me, you can feel free to do so now.

Participant A31:26

Yes.

OK.

Thank you for the opportunity also to share the little knowledge that I have.

Interviewer 31:39

It's not little, it's a lot of knowledge. It's very, very good discussion. I enjoyed that.

Participant A31:43

Yes. And also I think with the comment that I would say with this broad topic, I mean there's so many factors that we can look in and out on and with having said, I'm reading the research as well. You know it gave me more insight. To to answer some of the questions that that might be asked today, and I, I must say, I mean it's a learning curve. I mean this industry is very broad.

Interviewer 32:06

Hmm.

Hmm.

Participant A32:11

So I think also, I'm kudos to the researchers of of this topic because it's very broad like you can run with it. So many factors that you can put in here. So it's not very limiting and it's also a learning curve. I mean it's also a learning curve for us that are new.

Interviewer 32:21

Mm hmm.

Absolutely.

Participant A32:32

Projects that we see go in and out, but with this specific topic, I must say that yeah, the person who's dealing with this is going to run with so much information that even you yourself, you were saying that.

It's so much to chew on. So. Yeah. So yeah, I mean, it's a learning curve, like I said, and yeah, maybe who knows? One of these factors that we're talking about today might be implemented one day and everything can run smoothly.

Interviewer 32:46

Ladies. Yeah, absolutely.

Yeah, absolutely. But thank you for that. And I'm going to stop recording now because this interview is concluded.

Participant A33:08

Alright.

Interviewer 33:09

So just bear with me quickly.



Interviewer stopped transcription

Invitation to participate in research project- 20240823_112613-Meeting Recording

August 23, 2024, 9:26AM

28m 55s



Interviewer started transcription

Interviewer 0:12

Implied on the automotive industry, so the primary objective of the study is to examine the nature of port congestion challenges and we obviously looking at it within the automotive industry. So your insights are very valuable to the research and we just want to say thank you once again for participating. So I'm going to start with our discussion by looking at port infrastructure and that is going to be the first point of our discussion. And my question to you is, how

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would you describe the current state of port infrastructure systems in the South African or African ports?

Participant D 0:50

In terms of adequacy or?

If it's sufficient, or can you see if it's sufficient?

Interviewer 0:57

You can describe it both ways. Adequacy if it's efficient.

Participant D 1:02

OK.

On my side, I think there is really a growing demand for for the infrastructure.

So I would say it's sort of like moderate because.

There is.

The the the port infrastructure itself and I'm speaking on all of the posts that are processing automotives.

There is a demand to process a lot more units.

Pay Anna, but the port doesn't have the capacity, so I'd say it's sort of like moderate. And with the growing demand and everything. So that is where sort of like the congestion is coming from because of the lack of the infrastructure. The import export.

Interviewer 1:53

OK. And how does road and rail contribute to that?

Participant D 1:55

Finish.

I went on the on the on the, on the rail side as well it is.

Interviewer 2:04

Mm.

Participant D2:07

There is congestion, particularly because of.

Theft and vandalism, I would say. The infrastructure is the. So you can do a lot.

You can do it, run a lot more trains.

I mean per day you can do up to 46 trains.

Bidirectional so meaning that you can do a lot more in terms of automotives. So you can run up to five trains a day.

For automotives, because now.

Interviewer 2:36

Hmm.

Participant D2:39

There is the theft and vandalism you get that the capacity is now reduced to a

point where you can just run, be able to just run five trains a day to. I'm

speaking on the Devon site. So now we've trains, they take a lot more units than just trucks, so.

Interviewer 2:53

Hmm.

Participant D2:59

So you get that a lot of the customers now have have gone from using rail to Rd.

And now when you get to the port on the road side.

Interviewer 3:10

Yeah.

Participant D3:11

They sleep capacity in terms of the ability of the port to actually process the trucks as well. So that leads to delays that leads to congestion at the ports because really can't meet the the demand as well. So there is a lot of constraints, there is a lot of challenges.

Interviewer 3:26

OK.

Participant D3:31

The infrastructure on the real side is there the biggest.

Interviewer 3:34

Hmm.

Participant D3:35

Challenge.

Is the theft and vandalism.

Where you take it, steal cables, they steal the the the infrastructure on the signalling side and then now you can run trades because you have to go and fix them before we can actually run trains, you know.

Interviewer 3:41

OK.

So that's a very interesting point and thank you for that point. So my next

question is how does the quality of the port infrastructure contribute to or worsen port congestion issues?

Participant D4:10

On automotive side, because now.

It's.

It's just really getting a call from the the vessel to the thinging to to, to, to to the key side and moving out over to the stockpiles and everything. So in terms of quality, I wouldn't know.

I would say I wouldn't say it affects because it's it's not, it's not, it's an it. It's an, it's a civil infrastructure, if you know what I mean. So if if you've got.

The staking area or where parking Bay.

That's open. I think they other customers.

Like BMW, for instance, would want their cars to be in a covered space, but you get the cover spaces and the ports are very limited, so I'm speaking on the maybe quality from that perspective that the parking bays that have covered.

Interviewer 5:02

Hmm.

Participant D5:15

Spaces are very limited and I don't know if that's the quality aspect that you are referring to.

Interviewer 5:20

Hmm, definitely it is. No, definitely it is.

Participant D5:23

It is.

Interviewer 5:24

So with in terms of port strategies, because we've talked about infrastructure. So let's talk about the strategies.

Participant D5:27

Practise.

Interviewer 5:32

What strategies or measures can be applied to improve operational productivity and competitiveness imports?

Participant D5:33

This can be employed to improve.

OK, there is think it's a value chain, right? First of all.

Interviewer 5:46

Mm.

OK.

Participant D5:48

So I think an integrated portrait strategy.

It's very, very much important so that you can increase efficiencies within the port. So you have to understand that the port.

Interviewer 6:00

Mm hmm.

Participant D6:04

These evacuation, so the amount of evacuating the port now. So because rail is very constrained and there's no.

Sort of like an integrated planning between the port and the rail side as well as the inland terminals.

That is impeding on the capacity issues. So a strategy where you have an integrated?

Operation and planning.

Between port the inland port as well as the rail would go a long way in terms of enabling efficiencies within.

The port because you've got at the end of the day, you've got.

A limited space that you can, you know, from an automotive side where you can actually park the cars. So you need the port to move from just a, you know, a parking, but to a more of a throughput wave you limiting the number of days that you're giving clients.

Interviewer 6:54

Hmm.

Hmm.

Participant D7:16

Where they can park their car so that it's you have efficiencies, so.

Interviewer 7:21

Hmm.

Participant D7:22

In that regard, they are enablers that you can, you can implement that can

enable this kind of integration, 1 being technology, it has to be driven through technology. There has to be transparency within the whole value chain.

Interviewer 7:36

Hmm.

Participant D7:39

There is this concept called the Omni channel, where you've got a platform where that enables all of the players within the value chain to be able to share.

Interviewer 7:40

OK.

Participant D7:51

Documentation for instance.

For processing the automotives so that you enable efficiencies and I think that's where it's lacking.

Interviewer 7:55

Yeah.

So you would say there's a gaping.

Participant D8:13

Have integrated.

As much as we do have those integrated.

Planning and processing, but I'll tell you one care where you've got.

Interviewer 8:21

Yeah.

Participant D8:25

You're only starting to plan for the real side, for instance, in terms of processing. Your automotives when you've got a vessel coming in, so we have a view that the vessel's gonna be coming in the next 21 days for instance, but.

Interviewer 8:35

Yeah.

Participant D8:42

You get constant communication in terms of, so we don't plan upon the real side for a vessel coming in for in 421 days. We're only gonna start planning for it.

Once we know that, it's gonna, it's gonna be better in the next 24 hours, right? In terms of if you eat in those automotives, so we must address those cleaning processes where, OK, we need to plan for it in 2021 days, right. And on the real side, for instance, even on the roadside. So there needs to be that. So the gap from a strategy perspective is in terms of integrating.

Interviewer 9:00

Yeah.

Mm.

Participant D9:25

The whole entire value chain.

Meaning the parts terminals.

Interviewer 9:28

Yeah.

Participant D9:31

The the customers.

The the real side, the roadside there needs to be 1 channel in which everyone sees what is happening.

Interviewer 9:34

Mm hmm.

OK. That's actually very interesting. And I think you've actually even answered the second question because that would have been my next question like best practises. So I like the, I like the concept of integrated port strategy where you integrate the the various infrastructure so that it creates an omnichannel.

Participant D9:43

****.

No.

Interviewer 10:03

So with that being said, let's talk a bit about operations, right? How can you describe port operations? How would you describe port operations, managing balance, the balance between demand and supply aspects?

Participant D10:15

Change my 6:00.

Oh.

So I'm gonna speak on what I know in terms of the real size, right, because. More versed in that in terms of what is going on on, on the real side.

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One as I as I said, and I'm I'm from the integrated planning perspective that that is lacking so and.

Even with the you know operations depends on the infrastructure configuration.

Interviewer 10:54

Yes.

Participant D 10:54

So if you get into the port with a train, you go into a yard.

Where they they they it's called the staging yard, right?

Interviewer 11:02

Mm hmm.

Yeah, yeah.

Participant D 11:08

So then if you've got, then they're the terminal area where cars come on and off the train.

Now, because infrastructure is configured in such a way that you have to come back, you come in, you pull the train into the yard and then leave it with electric locomotives. And then you have to now wait for diesel locomotives from the depot, which is possibly 1520 kilometres away. So there is a delay.

And then you come in with the a diesel loco to come in, pull, pull the train out of the yard and push it back. So that takes a lot of time, particularly when you look at Durban when you're looking at the the, the rural terminal, that infrastructure is not figured in a way that it makes the operation very efficient.

Interviewer 11:58

Yeah.

Participant D 12:05

And because now there's also.

Compliance issues in terms of how you even offload, you drive the cars off the train. There's a lot of delays and even.

Interviewer 12:13

Yeah.

Participant D 12:22

With the the the requirements from the customers that you have to have certain you know, even though that's the standard for safety reasons that the driver has to be qualified he's but then based in terms of drivers you find that OK now.

Interviewer 12:32

OK.

Participant D 12:41

Well, in order for you to process this train, you need this kind of drivers and they need to be qualified in in terms of that. So they tends to be a lot of shortage shortages. Also some of it going from the handover processes. So if for instance from a real perspective TFR then needs to hand over the consignment from, from, from with.

Interviewer 12:52

Hmm.

Participant D 13:11

Because the the company itself that does the driving, I think, I think it's a third party.

They not contract to to to transmit.

Interviewer 13:16

Yeah.

Participant D 13:21

So now they need to hand off. There needs to be a hand over process from TFR to the state party, and then from this third party to TPT, which is the terminal operators, the port terminal operators. So you see that that handover process is it it. It introduces in inefficiencies instead of.

Just handing over from TFR to TPT.

And even in that case, they.

Interviewer 13:49

OK.

Participant D 13:51

Because we we run company.

But different oldies.

That handover process doesn't even need to be there, but it's there because of bureaucratic processes and you know.

Safety reasons as well. Say OK, you're handing over. We don't know what happened in between Houting and Durban, so. But at the end of day, we are one company. That's what I feel. I called that TPT and TFR is 1 company. So if.

Interviewer 14:07

Yeah.

Yeah.

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Participant D 14:24

A customer gives TFR, their car, their trust in Transnet, just TFR, but they transmit transmit, so they need doesn't need necessarily be a process where TFR hands over a consignment to TPD, which is introduces a lot more.

Interviewer 14:29

Hmm.

Yes.

Complexities.

Participant D 14:43

Delays. If inefficiencies. Really. Yeah. So from that perspective, there's a lot of inefficiencies from an operation.

Interviewer 14:47

Yeah.

Hmm.

Participant D 14:55

Perspective, but also from a planning perspective, as I said, the lack of integration there of.

I wouldn't be able to speak a lot for the the, the, the roadside.

Interviewer 15:08

Yeah, but but just in terms of the, you know managing so you've you've touched on the operational issues and the, the, the reason why these a lot of inefficiencies.

How does that affect the demand and supply when it comes to the actual gate services? Because obviously there's what we call seasonality, where people buy

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at certain times, they buy higher amounts at certain times or you have weather conditions, you know or you've got stakeholders who have now pushed an order forward. So how do you manage that kind of thing?

Participant D 15:44

Hmm.

I wouldn't be at a capacity to speak on the.

On the on the port side, the TPT side, but as far as I know.

Interviewer 15:55

Hmm.

Yeah.

Participant D 16:00

So you've got, remember we we on the planning side we've got.

That 21 day window where you the customer actually orders places an order for service, for, for, for, for, for, for, for transporting of the consignment.

So on that side, we have a view and a custom would actually commit that.

Be moving per year. I'm gonna be moving 10,000 units, for instance, and then we plan based on on that. Now obviously that is going to be vary and because now we've already and then we have what we call the next week business, right? So we have different levels of planning.

Interviewer 16:47

Hmm.

Participant D 16:50

And.

If then there is a higher demand then we have to release more resources.

Meet that particular demand, right?

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So they they challenge is that.

We we have reinvested resources where we dedicate certain work ONS and certain locomotives to the debit service for instance.

And when we plan, we plan for a 21 day window. So for maintenance purposes and for maintaining their rolling stock.

Interviewer 17:20

Yeah.

Participant D 17:29

You find that, OK, we've said that we're gonna be maintaining our locomotives every two weeks or such things based on the demand for that we have forecasted for the 21 days. Now. If that then when it comes to and then it's 15 days now the demand increases and then now you find that there's a mismatch with now allocated certain rolling stock for maintenance because we're planning for that 21 days, which was maybe 10,000 units and it has now increased to 20,000.

Interviewer 17:37

Hmm.

Yeah.

Participant D 18:04

So they we need to release more resources, but we can't.

Interviewer 18:04

Yeah.

Participant D 18:10

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Because they're now, I'm confused. That's the imbalance. So. So because it's very dynamic, so there needs to be dynamic decision making and we need to be able to plan for worst case.

Interviewer 18:10

So that causes some issues.

Mm.

Participant D 18:28

Best case and you know, somewhere in the middle. So I feel like.

Interviewer 18:33

OK.

Participant D 18:34

We don't have. We're not as flexible when it comes to responding to demand and I will make it a very it's the same kind of concept. I will make an example with what happened with with Cole.

Interviewer 18:42

Yeah.

Yes.

Participant D 18:52

When when the the the war in Ukraine started?

Interviewer 18:57

Yes.

Participant D 18:57

The demand spiked.

And because there was a really constraints on the real side, we will not be able to, but that particular demand because it was we had Satan rolling stock in maintenance sat in rolling stock when we couldn't even fix them and then they were.

Interviewer 19:14

Hmm.

Participant D 19:20

You know infrastructure constraint because of that and vandalism. So we took a very long time to actually respond to that demand. So I think we we applied the sort of kind of thinking for the automotives, we not we don't respond.

Readily or as fast as we can to these as we should to the to the demand.

Interviewer 19:40

As you should, yeah.

OK, that's very.

Participant D 19:47

And that's the.

Interviewer 19:50

That's very interesting perspective.

Let's talk a bit about competitiveness now, and this focus is going to be mainly on the OEM or the original equipment manufacturer.

What are the primary impacts of port congestion on an OEM?

Participant D20:07

Oh, the first one, I think we've already attached done in terms of being able to to respond to demand.

Interviewer 20:12

Yes.

Participant D20:19

And if an OEM cannot respond to demand, then you know they no longer gonna be able to be competitive. So it's stems from inefficiencies that, OK, if I'm a customer today and I want a car, I don't, I don't want to wait for a month or.

Interviewer 20:30

Hmm.

Here.

Participant D20:44

To get that call right? So I think also what OEMs can do. Obviously, all of this affect their competitiveness, right?

Interviewer 20:54

M.

Yes.

Participant D20:59

But what? How they can counteract it? Because we know we know that we have

certain models for this and then you can forecast based on historical data to say, OK, if I'm if I'm rolling out a new model for instance.

Interviewer 21:09

Yes.

Participant D21:17

An extra or an X OK extra that manufactured in South Africa. But if it's an import, you can focus that based on my historical data. I know that the demand for this can I can focus it to around 100 for South Africa and then before even rolling out the model and advertising it and everything, you know that we have already units in South Africa.

Interviewer 21:23

Yeah.

Participant D21:45

Obviously that's also depend on the infrastructure that is available for the packing base and everything so that you can readily respond to.

Interviewer 21:45

Yeah.

Participant D21:56

Customer demand.

Interviewer 21:56

Potential pitiles, yeah.

Participant D 21:59

Yes, because if I order today, if I need to go to a dealer and then get that car.

Interviewer 22:00

Oh.

Participant D 22:06

And so that that means it it already, it has to be in South Africa from an import perspective. So that's how. So I think forecasting using data.

Interviewer 22:06

Yes.

News.

Participant D 22:18

That's where the competitiveness is going to come from. Making models in terms of the demand for it so that you can plan sufficiently. And because we have this inefficiencies, the model has to take into account the inefficiencies within that. That's how you're going to remain competitive because we cannot just say that, OK, these the other aspect of components now of.

Interviewer 22:18

Mm.

Yes, yes, that's a big one.

Participant D 22:48

These.

Because now if you're a manufacturer based in South Africa, you've got

companies coming in, right. And I would be able to maybe speak on that thing with that. OK, it's, it's you, your production line actually just depends on those those components coming in at the right time when you need them.

Interviewer 22:58

Hmm.

Participant D23:14

So even on that, I think there is planning that needs to come in. There is forecasting that needs to come in.

Because they they they is.

It's it's, it's random, it's stochastic. If you look at what's happening with weather conditions for instance.

Interviewer 23:34

Yes.

Participant D23:34

Although model them, we can model that randomness of it and say OK, we know that typically in December we have floods and everything. So we might not be able to respond as efficient as efficiently, but we need to tell the customers that.

Interviewer 23:46

Pm.

Participant D23:53

So that they can.

Modify their production processes in line with what our weather forecasts are,

so it goes back to that integrated planning. So the integrated planning with customers with port with allows everyone not only the port allows everyone, even the OEMs to be competitive. Even then if those ones that are manufacturing in South Africa because.

Interviewer 24:06

Yes.

Participant D24:23

Where that for instance, we have to take into account whether or not you've got the best infrastructure in the world. But if the weather is not good, it's not good. It's not good. You cannot process that stuff.

Interviewer 24:31

Hmm.

It's yeah, true.

Participant D24:35

Right, so we need.

Interviewer 24:35

You can't fight Mother Nature, yeah.

Participant D24:37

Yes, you you cannot you. You need to take that into account. That. OK. I'm predicting that the weather's not gonna be good in Durban in December. So OEM BMW must take that into account. That OK, there's gonna be a delay. So if the weather is not gonna be good in December, then we're gonna let's ship a lot more components that you're using in your production plant in November.

Interviewer 24:50

Hmm.

Participant D25:06

For your December production, so that integrated planning, I think that's the element way.

Interviewer 25:07

Hmm.

Participant D25:14

That allows for competitiveness for OEMs and for the port and for everyone. I think in the value chain. So it's not about one company being but the whole entire it's I read this article, it was about actually just the value chains competing against each other. So if the ability, if the value chain in South Africa.

Interviewer 25:34

Thank.

Participant D25:40

The automotive value chain in South Africa is not competitive. It's going to move from South Africa to China or from to India.

So it's just about.

The OEMs just being competitive, obviously they want to be competitive, but in order for them to become competitive, they're looking at the competitiveness of the whole entire VALU team.

Interviewer 26:04

Yes. And I think a lot of them will still think in a silo and they still think that I must be better than this one, but they don't realise that the value chain is actually, it needs to be integrated and it needs to be digitalized as well as you. As you mentioned earlier.

Participant D 26:07

I'm thinking of.

You don't understand.

The things.

Yes. So we, we I think as service providers from a logistics perspective, we need to enable those competitiveness for for forms to OK we enabling them, they can be competitive on their. On the other side of the customer you know perspective in terms of what they offer.

Interviewer 26:25

Mm hmm.

Yeah.

Yes.

Participant D 26:39

That we need to enable the value chain so that they come to South Africa and come to invest in South Africa from a manufacturing perspective.

Interviewer 26:50

So it's a very interesting perspective and I think thanks again for your time and your valuable insights. I think that your your input is greatly contributing towards the study. So if you have any further thoughts or comments that you'd like to share, please, please feel free to do so now.

Participant D 26:57

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Your your input is.

I think.

Oh, OK. OK. No, no, no. I think I have. I've I've said I.

Interviewer 27:13

You're very knowledgeable. I've learned so much from you.

Participant D27:15

Let's go from here. Yeah, I've said my piece.

On the on the.

I'm I'm very passionate, I think for, for, for, for that Omni channel and digitalization of the value chain. And we need to, there needs to be a lot more collaboration I think within the value chain and it's a great thing that now you have a government coming in.

Interviewer 27:28

Hmm.

Absolutely.

Participant D27:45

With this supplier parks.

Automotive supplier parks and bring everyone in the private sector participation as well within the part system within the.

The rail system, so that is going to a long way that that's another perspective also that one can bring in in terms of bringing in private sector players, private sector participant into the, the, the Transnet system as you can see it.

Interviewer 28:01

Yeah.

Yeah.

Participant D28:19

And that's gonna increase competitiveness of the OEMs. That's gonna bring in a lot more efficiencies. That's gonna cut the cost of doing business. So that's another solution to this whole entire.

Exercise as well to say how do we then enabling enable port efficiencies and everything? So yeah.

Interviewer 28:42

Yeah, I know. Awesome. I agree. Thank you so much. This concludes the interview. I'm just going to stop recording.

Yeah, cool. Awesome.



Interviewer stopped transcription

Invitation to participate in a research project- 20240829_145957-Meeting Recording

August 29, 2024, 12:59PM

27m 41s



Interviewer started transcription

Interviewer 0:31

How would you describe the current state of port infrastructure systems in South African ports?

Participant G0:39

OK, just to answer you.

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At the moment.

I don't think we are at the point where I can say it is controllable because it shows that there's certain things that they had to start to work on it to accommodate the capacity that is planned for everyday. At the moment we are not winning.

Interviewer 1:06

So when you say you're, we're not winning, just can you elaborate more on that? What are the current issues?

Participant G 1:06

When you.

OK.

What are the current issues that we are having is that you find that we are we are they want us to make bookings in advance like a day before for all the LS PS to say how much I will bring in to put and even they are aware about the cars that are transported by train which from their side they know how much follow they can take a day.

Interviewer 1:21

Hmm. Hmm. Hmm.

Participant G 1:39

But you'll find that before the day goes even more than 3-4 hours, you'll find a port is congested and now they stop the operation. And in that manner it already now inconvenient everything that is in transit. So that's why I'm saying at the moment we are not at that point where we we can say that everything is in place. There's some, some of the things that need to be done to be able to accommodate.

Interviewer 1:47

Yeah.

Hmm.

Participant G2:10

What it's expected from there?

Interviewer 2:13

OK. And and what about other infrastructure like road and rail, to what extent does that have an impact?

Participant G2:13

Yes.

Can can please, that's all for.

Interviewer 2:25

Sure.

Participant G2:34

Sorry, sorry, sorry man metric. There's a driver was wanted to communicate something to me. Sorry about that. Yeah. What I can say regarding transport, transport, we work.

In a certain way, where we are expected to reach a certain target for our production, especially to start with the ATAS, it's very efficient for us that we got the correct an ETA for our flight. So if I'm saying today.

20 of my truck will be in Devon and when they got to port now maybe just to make an example, they get stuck there. It means now I'm affecting the whole operation for that day. It means other OEMs, they will be complaining because now they won't get their cars.

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Interviewer 3:17

Yeah.

Participant G3:28

On time, so it affects us very badly and in such a way that sometimes you end up being losing client because they think you.

Interviewer 3:29

Hmm.

Yes.

Participant G3:43

And make it in the in this business. While it's not you, they don't see what is happening and when it come to export export anything that is export it's play a very major role here, especially in South Africa because we are making a lot of money through export more than import. So that's where I am that age. I think if ever we can have a efficient operation we will be very happy here.

Interviewer 4:01

Yeah.

Mm hmm.

OK. So so just in terms of the port quality, my question is how does the quality of port infrastructure contribute to or worsen port congestion issues?

Participant G4:13

As as thought, yes.

OK, in that sense, what I can say is that.

For business wise.

Interviewer 4:36

Mm hmm.

Participant G4:36

It affect the production, as I'm saying that being running a transport company where you end up being delayed for the whole day, it means the carrier is not making money and we're talking about a lot of money then you see so and we're not talking about one truck especially, you'll find that when we deal with export we deal with.

Interviewer 4:51

Hmm.

Participant G5:04

Probably 300 cars that are loaded by one LSP. So if 300 cars, it's nothing for a sense, we're using 42 trucks, it means 42 trucks are stuck and there's no movement. So that Coe just said congestion that we experience already. Now it's having a very bad impact on the business side and the production for that day. So I'm not sure, maybe I am answering you.

Interviewer 5:08

Yes.

Yeah, yeah, absolutely. No, that's absolutely valuable. So let's talk about port strategies because now we've highlighted issues, we've highlighted the fact that you don't believe that the port infrastructure is where it needs to be. So my question is, what strategies or measures can be applied to improve operational productivity and competitiveness import?

Participant G5:34

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In a way, yeah, yes.

My site I can say.

It can start from the manpower.

That your manpower is most important because now, if ever God can accommodate close to 5000 unity, but we don't have enough people for that kind of operation. We are aiming to fake.

Interviewer 6:22

Hmm.

Participant G6:23

And secondly, the space, it means that.

What they need to have a way of extend the workplace, their workplace, because now they're working in a in a very small place, weights easily congested.

Interviewer 6:40

Yeah.

Participant G6:40

And some of the things even the SS team, the SS team.

Can I please just just one second, just one second?

Interviewer 6:47

Sure, no problem.

Participant G7:36

Sorry, sorry, sorry sorry. I am really sorry about that issue so sorry about that.

Yeah, one of the other thing, it's the assisting the assistant need to be upgraded

because we got situation where they are really affecting the operation where now their system when they are scanning the cars.

Interviewer 7:39

No problem, no problem.

Mm hmm.

Participant G7:55

You'll find that whatever they are scanning their scanner and the information on what they are scanning, it doesn't correspond in that way you find they are holding area, they cannot accommodate the capacity.

We should've more than baby if we talking about cars, as we're dealing with cars, they cannot even accumulate 150 cars.

Interviewer 8:19

Sure, I'm taking.

Participant G8:20

And by then, it's their fault, and by now, using a manual to accept whatever goods at port it is a delay. So by improving.

Their system, it will help and by making sure that we got the correct people for the job.

Because sometimes it does happen that we have people who are working, but we need people who can look beyond.

Interviewer 8:42

Yes.

Participant G8:51

If ever I'm encountering a problem today, that problem must not be something that I must have tomorrow. I must do better the next day. I must have a solution for that. But in this case, no.

Interviewer 8:58

Hmm.

Participant G9:05

The problem that we are facing within this week, even next week we can anticipate the same problem. So I think their management skills, they need to talk their take their people for training so they can have more people who have more skill, how to handle such capacity, they are dealing with.

Interviewer 9:19

Hmm.

It's a very interesting point that you make. So you talk a lot about the human resource element and you also talk about the system, the current processes and systems that they have in place.

So what? To what extent do you think digital interventions can improve operations?

Participant G9:48

I think it it can improve a lot because now we we are now in a in a world where technology, it make our life easy, but again the same technology that we are using, we need the right people to implement it and it must be one of the system that at least it's accessible for everyone, not something that will be more now difficult for people to.

Interviewer 9:51

Mm.

Participant G 10:19

Be able to use because if ever I am creating something every day that thing it's difficult for people now to use it. It's it's again to create a crisis.

Interviewer 10:31

Exactly. No, that's very true. And and. And with that being said, are there any specific initiatives or best practises that you believe can be effective in addressing port congestion challenges apart from the human resource element and the systems?

Participant G 10:32

Yes, yes.

From from where I'm I'm looking this. Yes, I think at the moment.

We we have people who are highly skilled people who can at least make a A who can bring the good and make a big change.

Interviewer 11:03

Mm.

Participant G 11:12

From the the port that we are having and that port even even if it's the way I said it, it's so small, but they can make a way that it can operate and accommodate everyone without experiencing any congestion. So again, digitally, as you said, it will help, it will help a lot, yes, but even we we need people who are, I don't know, maybe a suitable people for the right job because.

Interviewer 11:33

Mm hmm.

Yes.

Participant G 11:43

Yeah, believe me.

Some of the things we believe that.

A certain person can do so much, but, but I have learned that.

Interviewer 11:53

Yes.

Participant G 11:57

A person, if he's well equipped, can perform.

A. A job that can be done by three or four people.

Interviewer 12:06

That's very true.

Participant G 12:07

If it's well equipped, but if a person is not well equipped, again, it's a it's a problem because that person is causing now a problem within whatever working environment he is in.

Interviewer 12:09

Yes.

Hmm, well, that's being true.

Participant G 12:22

I have. I have landed in this many years that I work on the operation that.

Interviewer 12:29

Yes.

Participant G 12:31

We we we don't challenge ourself as people to go beyond expectees. So we need people who can go extra mile to make sure that what I'm experiencing today. No, no, no. I must have a way and that way because you are in that environment, you will find it what need to be changed, what need to be developed.

Interviewer 12:44

Hmm.

Yeah.

Participant G 12:52

At this point, we are at the point where they are relaxed.

Interviewer 12:57

Mm hmm.

Participant G 12:57

They just waiting for another disaster to happen and they announce it.

Interviewer 13:03

I I like. I like your perspective very much and you know that that leads into the next question because you talk very much about the skills gap and the operational side. So now this question that I'm about to ask you is literally related to port operators. So the question is how can you describe how port operators manage the balance between demand and supply aspects at gate services to ease congestion?

Participant G 13:31

Fish on that one. I wouldn't have that much information.

Because some of the things they need, somebody who is within their the the area and most of the time when I'm visiting that site, I don't manage to see the whole operation because some of the places we've got limited access to go through. You see, yes. So I I wouldn't, I wouldn't elaborate more about that.

Interviewer 13:45

Yes.

Yeah.

OK.

Well, look, you've you've given a good, good point of view in terms of the you know addressing you shouldn't have the same problem that you had yesterday. You know today should be better. So let's talk about what challenges to put operators typically face, you know, in regard to port congestion and how do you think they overcome these challenges from what you've experienced?

Participant G 14:02

Some.

So far they are using it just like normally measures, whereby you will stop your operation until it get better.

And that's not all. That's not it.

Interviewer 14:40

Yeah.

Participant G 14:42

They need to manage it and if you are managing something it's totally different because when you're managing the situation you you are be able to operate within that situation to get.

More solution not to. You know, if ever I'm I'm going to give you an example.

Today we are congested here in the yard where I am now. We need to see what is the problem and we need to know what caused this problem.

Interviewer 15:04

Yes.

Yes.

Participant G 15:15

And the day we we get what is the problem and how can we resolve the problem? We will never experience that problem that we encountered today, but at this point they are just, I don't know, trying to deal with what they can do by stopping the operation and the the same situation that make them to be congested, they will have that in few weeks or in two days to come again because they don't, they don't get to a part where they ask themselves how how do we get to this.

And within the operation where we are we, we have got a very, I don't know limited yard but we managed to accommodate so much everyday without congesting our track or making the client wait outside because we got a planning and a good work. So planning better it will help.

Interviewer 16:01

Hmm.

Yes.

Participant G 16:16

And having the right people, it will help.

Interviewer 16:17

The.

So with that being said, let's talk a bit about competitiveness and and how this and how does port congestion interfere with the competitiveness of a business. So my first, my my next question to you is what are the primary impacts of port congestion on the OEM or original equipment manufacturers?

Participant G 16:41

It got a very bad impact because now then I will make an example like OK, I'm like 4 or BMW. They are have a a specific number of cars that are manufactured within 24 hours and they do not have enough space to store car. So by any two or three days delay it means now the yard will be overpaid with cars.

Interviewer 16:49

Yes.

Participant G 17:11

They won't have a space to park those cars in a certain way now they had to get an alternative place where they had to store their cars.

In that man again, they need to make payment to store their cars wherever they are storing them. So you you see now it already have a negative impact, but if the operation is running smooth, it means whatever it's being.

Interviewer 17:24

Look.

Participant G 17:36

Produced a day, it will be accommodated. Everything will go accordingly. So. It does affect them and we see ourself in a situation where we had to help them time and again to make sure that at least we we don't find ourself in a situation where we are now rushing the vessels.

'Cause there's other problem. The vessel, it got a certain time where it had to stick in and once it's stuck in those cars that I expected to be, I thought they need to be there. If not, there's certain penalties that need to be paid.

Interviewer 18:05

Hmm.

Yes.

Yes.

Participant G 18:22

That is again going back to the OEM, which is not a nice thing because we talk about millions here for even for five or three cars that I miss shipped. Yeah, it's it's it's not good. Believe me, it's not good. So we are working under a a very limited time frame every day.

Interviewer 18:34

Wow.

Sure.

Yeah.

Hmm.

Participant G 18:45

For a vessel, when it open the stack, we work within 15 days and sometimes you find it that we talk about 5000 cars that need to be shipped from point A to point B. So we we have now put some of the things in place where we store some of the cars to the nearest to the, to the nearest port. Like maybe if I'm giving you an example.

Interviewer 19:09

Yes.

Participant G 19:09

We are, we are busy and now pays in Roslyn. It means now you store your car somewhere close to port. Maybe your ship maybe 20 and maybe no, no. Maybe if ever that that vessel need 5000. Maybe you move 3000 in advance and then you are left with 2000 when the the stack open that 3000 at least is not far from from port. So that way you can manage to be able to deliver all your cars on time. So it's it's really very, very. Struggle and to give you an idea.

Interviewer 19:50

Yes.

Participant G 19:51

With carriers, you find that only a few carriers are allowed. That's why I'm saying even the the space the constraint so.

Interviewer 19:57

Yes.

Participant G 20:01

Planning that place to be an open place where it can accommodate more trucks and more cars, even other goods, because we are not talking about only cars.

Interviewer 20:12

No, of course.

Participant G 20:12

It it, it will be a very good thing and it will be a big improvement. I think most Oem's and other clients from all over the world, they will behave.

Interviewer 20:24

No, absolutely. I I couldn't agree more on that point and and and just let's talk more about the actual strategies from the OEM side. How do they typically respond to it? Because now you you've spoken about the negative impacts for them like they lose money, they get penalties, there's a lot of negative impact on their side, but what do they typically do in you know is there, is there a rule book that says in case of this is what we do?

So that we can remain competitive and we can remain operational.

Participant G 20:59

In most of the time since we've been operating now, what I have learned is that for sometimes they do give them the extended time. If ever it comes to a push where a port is the one at fault, they do extend maybe two or three days, or they allow late arrival and goods. Or it can be maybe cars as we are talking about cars. Yes. So they do have that exception but for.

Interviewer 21:14

Yes.

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Thank.

Yeah.

Hmm.

Participant G 21:29

For some other reasons to tell you the truth, it's not an easy task. Yes, but yeah, there. The other part is that.

Interviewer 21:32

Hmm.

No, I can't believe you.

Participant G 21:38

They they do, the OEMs, they do have a way since I mean you they have learning this. That's why they have managed to approach other companies. So they can open doors for them to store their cars. As I'm saying that's a positive side where they can move their cars to the nearest port. So when the stake is open, they don't have that pressure of we are we we have 15 days now out of that 15 days, five days we couldn't deliver to port because of congestion you see.

Interviewer 21:42

Yes.

News.

Hmm. Hmm. Hmm.

Participant G 22:11

So they do there. There is some good things that are happening now that are put in place where at least.

For now, we are not that much under pressure because we've been with them

for sometimes, but again, it doesn't excuse what upset that at least the improvement it's. It's a reality that.

Interviewer 22:25

Hmm.

No, of course.

No, that's absolutely true. So let's talk about external factors causing port congestion and by external factors. Let's look at weather conditions, seasonality in terms of when there's higher demand versus lower demand and also unexpected events such as political unrest. You know, nation contentions that we currently see, how do that, how does that contribute to the variations in port congestion levels?

Participant G22:38

Yeah.

Hmm.

Yeah, that one. It's it's something that it's not. It's unforeseen. And usually if it does, then they do announce it and no one at any point is at fault because if ever maybe I'm going to be honest with you, we do have situation where you'll find the man wrote like.

Interviewer 23:12

Yes.

Participant G23:21

Entry this protest taking place, or there's a big accident in first case like this one. The OEMs, they are the ones now who are suffering because the port again won't accommodate it. That is something else that it's it's a reality and not a nice one but it's acceptable because from our side as I'm saying.

Interviewer 23:23

Yes.

M.

Participant G23:48

In such case, where we got situations, the ones that we we never know that they were going to happen.

Interviewer 23:56

Hmm.

Participant G23:56

I don't think anyone seaport in the wrong way or the OMC service provider in the wrong manner. No, we accept the situation, we work around it.

And we we wait. If we had to wait and the vessel does wait in such case like that because we do have situation like this time and again yes. But in that case believe me, it's just like a better rate or a better those kind of situation like that you don't no one can be blame, it's natural. It's natural cause yes.

Interviewer 24:10

Yes.

Yeah.

Yes.

That's very true.

There's no, there's no stop. You can't stop certain things. Yes. Awesome. And then let's talk about just general other challenges. Can you elaborate on any specific challenges faced by an OEM? Wind vehicles are delayed due to port congestion.

Participant G24:33

Yes, yes.

Yeah, for all EMS when especially.

Interviewer 24:51

Hmm.

Participant G24:56

They didn't meet their target. Just take photos and supposed to deliver 5000 cars and we only deliver 4495 with that 5 unity. That didn't make it. It does affect them and does have a very bad impact on our economy because now they're trying on the other side, won't be happy with that 5 units. It didn't make it. And again with the payment because now we have to look this in this way.

Interviewer 25:20

Hmm.

Participant G25:27

They are making a payment for 5000.

Unity to be shipped and now 5 Unity is short shipped. It means now they have managed to pay for something for service that they didn't get.

Interviewer 25:42

Yes. And it's not a small amount. It's a big amount.

Participant G25:44

It's it's not a small amount, it's a very big amount.

Interviewer 25:48

Yeah, sure. Wow, that's interesting. And and and in terms of the port congestion, how does it ultimately affect? We're talking holistically now the OEMs competitiveness in the automotive market.

Participant G25:49

Yeah.

OK, sermon. I was interrupted by a call. Can you repeat your question please?

Interviewer 26:07

So my question is, how does port congestion ultimately affect an OE miss competitiveness in the market in the automotive market?

Participant G26:09

Yeah.

I think it got a an impact.

And I think it will be a financial.

Interviewer 26:27

Financial, OK.

Participant G26:28

Yeah, financially, to have a very bad bad because we are all in this business because of money and if anything it's affecting the way I had to get my money then that's not a nice day since. So the congestion that is happening there is affecting lot of people, even us because some of them we have to tell the guys to go home and those guys they won't be paid for that day. So it affects it affect lot of things.

Interviewer 26:44

Yeah.

Hmm.

Sure.

Participant G26:59

Affect lot of things. Oh, OK.

Interviewer 27:01

That's very interesting. So thank you so much for your valuable insights. Thank you for your time. Once again, your input is greatly contributing towards the study and if you have any further comments or thoughts that you'd like to share with us now, please feel free to do so.

Participant G27:09

No.

OK. No at the moment, the air, I do not. But thank you for allowing me to be on your platform to share what I the listen that I know of.

Interviewer 27:30

It's not little, it's just very, very, very informative. Thank you so much.

Participant G27:33

Thank you. Thank you. Thank you.

Interviewer 27:35

I'm just going to stop recording. If you just stay with me.

Participant G27:37

No problem.

● **Interviewer** stopped transcription

Appendix D : Ethics Clearance Certificate

Ethics Clearance Certificate

Ethics protocol number: WBS/BA1815825/560

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below).

Project title Port congestion challenges faced by the South African automotive indust

Investigator / Researcher Ms Yvonne Dube

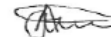
Nature of Project MBA (Research Article)

Decision of the Committee Approved, provided stakeholders and participants are advised that anonymity and confidentiality cannot be guaranteed.

Issue Date of Certificate 10/07/2024

Expiry date Date of submission of the project / research report

Chairperson Dr Ayanda Magida
☎ +27 11 717 3953
✉ ayanda.magida@wits.ac.za



Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.



11/07/2024

Signature

Date:

Appendix E: Consent Form



Research title : **PORT CONGESTION CHALLENGES FACED BY THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY: AN OEM CASE.**

Dear

Re: Informed Consent Letter

I am currently a student at the University of Witwatersrand and completing my research in partial fulfilment of an MBA.

I am conducting research on Port congestion challenges faced by the South African Automotive industry. Our interview is expected to last about an hour and will assist us to deeply understand how port congestion impact the Automotive industry or vehicles sales.

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

All data will be reported without identifiers. If you have any concerns, please contact my supervisor or me, our details are as follows:

Researcher name: Yvonne Dube

Researcher

Supervisor: Grant Sieff

Email: yvonne.dube@partner.bmw.co.za

Email: grant@icgrowth.co.za

Phone: 083 245 7849

Phone : 083 442 7465

Appendix F: Participation Information Sheet



Sculpting global leaders

Research title : **PORT CONGESTION CHALLENGES FACED BY THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY: AN OEM CASE.**

Dear Sir / Madam,

My name is Yvonne Dube, I am an MBA student at the University of Witwatersrand, Johannesburg. My supervisor is Dr Grant Sieff. I am conducting a research study about port congestion. The study title is **PORT CONGESTION CHALLENGES FACED BY THE SOUTH AFRICAN AUTOMOTIVE INDUSTRY: AN OEM CASE.**

The primary objective of this study is to examine the nature or current port congestion challenges within the automotive industry. This study will also seek to proffer solutions that are needed to mitigate port congestion. In this regard, the following are the research objectives:

- 1) To understand the causes of port congestion and how it affects the automotive sector.
- 2) To proffer solutions or remedies to the port congestion challenges face by the South African automotive industry.

I am inviting you to take part in an interview / focus group. If you decide to take part, your participation in this research study will last about 45 minutes. The interview activity will take place at the port car terminal at 10 am, date to be confirmed.

With your permission, I would like to audio record the interview / focus group. This data will be stored in my personal PC for 2 years and will be deleted after 2 years. Only the researcher will have access to the data.

The interview will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything else that could identify you. With your permission, other researchers may use the data collected from this research study, but your name and any personal information will not be used or passed on.

If you decide to take part in the research study, it should be because you want to be a volunteer; you do not have to take part. You can stop being in the study at any given time. You do not have to answer any questions if you do not want to. You will not get any benefits if you choose to join the research study. You will not lose any service, benefits, or rights you would normally have if you decided not to join. Taking part in the research will not cost you anything. You will not be paid for being in this research study. Your travel / data costs to attend the interview will not be reimbursed.

This research study will be written up as a research report. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours Faithfully,

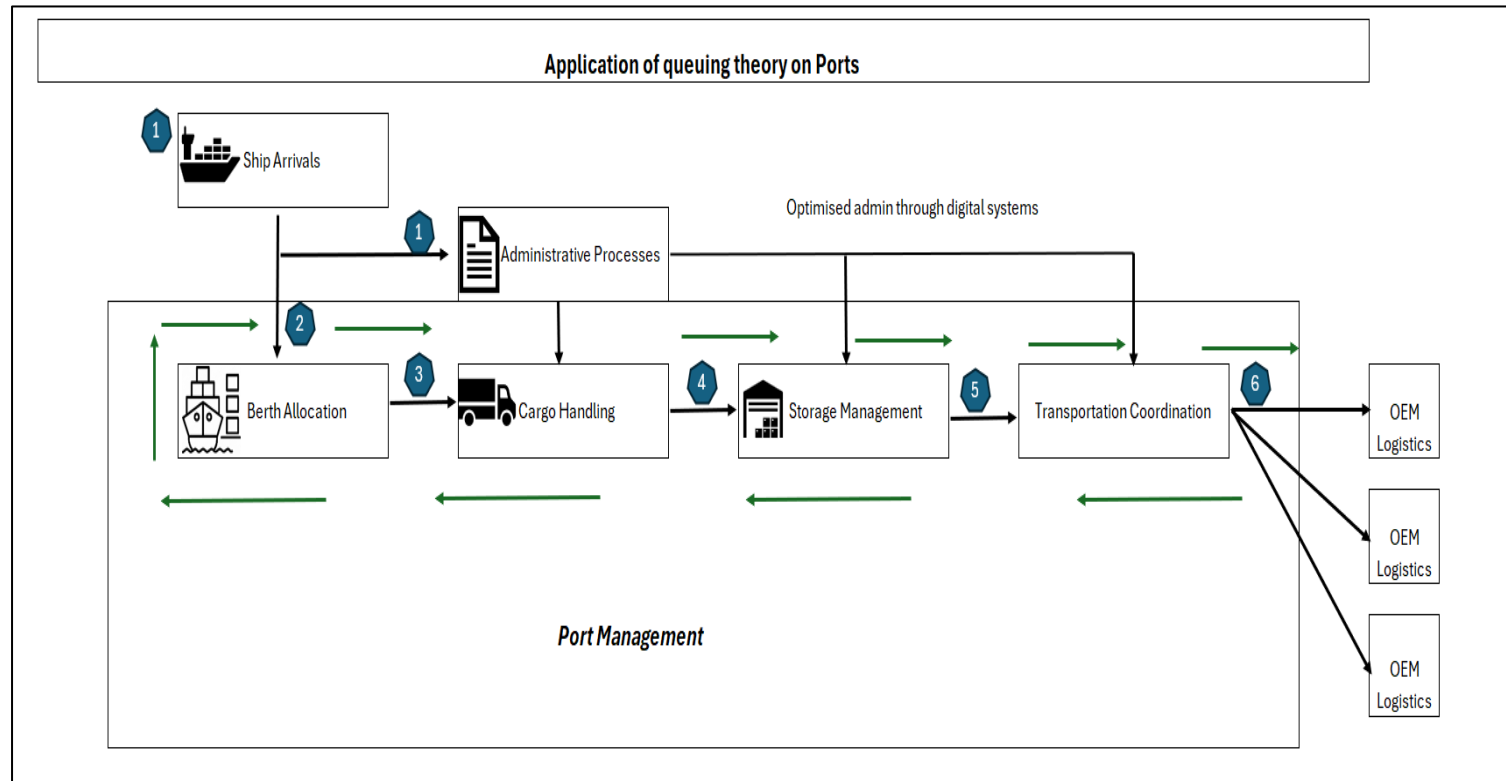
Yvonne

Researcher:

Kgaugelo Yvonne Dube, 1815825@students.wits.ac.za

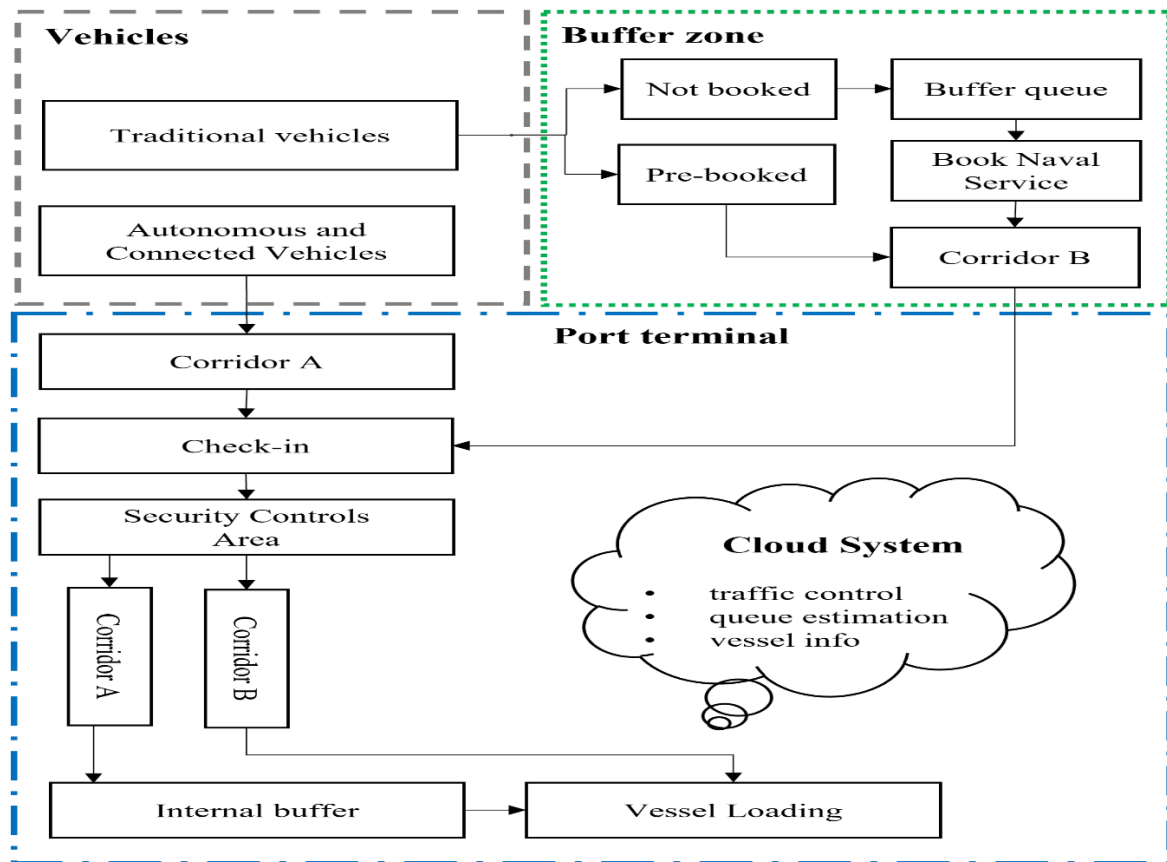
Supervisor : Grant Sieff, Grant.Sieff@wits.ac.za

Appendix G: Proposed model of queuing theory on port management



Source: Author's conceptualisation

Appendix H: Port Framework by Belcore et al. (2023)



Source: Belcore et al. (2023)

Appendix I: Consent letter: BMW

**BMW
GROUP**
South Africa



BMW Group South Africa

Your Reference: **Research Project**
Your message dated: **24 April 2024**
Department/Unit: **C3-2A-V-5/ Thabang Shoarane**
Telephone: **+27-12-522-4022**
Fax:
E-mail: **Thabang.Shoarane@partner.bmw.co.za**
Date: **24 April 2024**
Subject: **Permission to collect data**

Dear Sir/Madam,

This letter serves as a confirmation that your request to visit BMW Distribution centre at Plant Rosslyn to conduct your research has been approved.

When you are ready to conduct your study, please schedule meeting to discuss the procedure.

Any queries with regard to the above may be referred to the writer at the above address and telephone number.

Yours faithfully

BMW (South Africa) (Pty) Ltd.

Thabang Shoarane
Events Fleet Team Leader

Thabang Shoarane

24/04/2024

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A BMW Group Company
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Dr N Fikile (CFO)
G J Mkhize
T Achebe (CFO)
C C Pile
T Mokoale

1 S. M. Mkhize
2 M. Mkhize
3 M. Mkhize
4 M. Mkhize
5 M. Mkhize

Subject: **Permission to collect data**
Date: **24 April 2024**
Page: **2**

Yours faithfully
BMW (South Africa) (Pty) Ltd.

Appendix J: Consent letter: Portnet

Dube Yvonne, (Yvonne.Dube@partner.bmw.co.za)

From: Mondli Shoji Transnet Port Terminals DBN <Mondli.Shozi@transnet.net>
Sent: Friday, 09 February 2024 09:38
To: Dube Yvonne, (Yvonne.Dube@partner.bmw.co.za)
Cc: Prince Magoda Manganyi Transnet Port Terminals Durban; Zamo Ngcobo Transnet Port Terminals DBN; Sibongile Mbatha Transnet Port Terminals DBN; Amanda Ben-Mazwi Transnet Port Terminals DBN
Subject: RE: MBA research topic

Sent from outside the BMW organization - be CAUTIOUS, particularly with links and attachments.

Abgesandte außerhalb der BMW Organisation - Bitte VORSICHT beim Öffnen von Links und Anhängen.

Dear Yvonne

Trust you are well.

Your request to visit port and conduct your research has been approved. I will wait for your confirmation date, to arrange permit and safety induction.

Kind regards
Mondli Shoji

TRANSNET CONFIDENTIAL INFORMATION

From: Sibongile Mbatha Transnet Port Terminals DBN <Sibongile.Mbatha@transnet.net>
Sent: Friday, February 9, 2024 9:30 AM
To: Mondli Shoji Transnet Port Terminals DBN <Mondli.Shozi@transnet.net>; Amanda Ben-Mazwi Transnet Port Terminals DBN <Amanda.Ben-Mazwi@transnet.net>
Cc: Prince Magoda Manganyi Transnet Port Terminals Durban <Prince.Manganyi@transnet.net>; Zamo Ngcobo Transnet Port Terminals DBN <zamo.ngcobo@transnet.net>
Subject: RE: MBA research topic

Dear Mondli

I spoke to Prince about the same request, he has approved it so you can respond to Yvonne.

Kind regards



Sibongile Ka-Mbatha
Key Accounts Representative
Durban Car Terminal -RoRo
Office: 031-361 8646
Mobile: 083 284 1239
Fax: 086 545 7389
Website: www.transnet.net
Email: sibongile.mbatha@transnet.net

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YVONNE DUBE 1815825 FINAL REPORT _DR GRANT SIEFF.docx

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