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THE IMPACT OF COVID-19 ON PERFORMANCE OF PUBLIC TRANSPORT IN RWANDA

A CASE STUDY OF JALI TRANSPORT LTD

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Thesis Submitted in Partial Fulfillment of the Academic Requirements for the Award of Masters' Degree in Business Administration

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September 2023

DECLARATION

I**, NSENGIYUMVA MUNEZA James** hereby declare that this thesis entitled: "impact of covid-19 on Performance of Public Transport in Rwanda a case study of Jali Transport Ltd is my original work and it has not been submitted for award of any degree.

NSENGIYUMVA MUNEZA James

Signature……..

Date ……/……/2023

APPROVAL

This is dissertation titled “Impact of covid-19 on Performance of Public Transport in Rwanda a case study of Jali Transport Ltd has been done under my supervision and submitted for examination with my approval

Supervisor: Prof. Dr. Jean Bosco HARERIMANA

Date:……./…….....2023

Signature……

DEDICATION

This study is wholeheartedly dedicated to my beloved wife UWIMBABAZI Delphine, my children NTWARI MUNEZA Johnson, UMUHOZA MUNEZA Meghan and NSHUTI MUNEZA Reagan and also to my beloved Mother. your love has been my source of inspiration and gave me strength when I thought of giving up.

NSENGIYUMVA MUNEZA James

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NSENGIYUMVA MUNEZA James

LIST OF ABBREVIATIONS

Covid-19	: Coronavirus disease 2019
SARS-CoV-2	: Severe acute respiratory syndrome coronavirus 2
WHO	: World Health Organization
GDP	: Gross Domestic Product
%	: Percent
ERF	: Economic Recovery Fund
H1	: Alternative Hypothesis
H0	: Null Hypothesis
2019-nCoV	: 2019 Novel Coronavirus
VIX	: Volatility index
EPU	: economic policy uncertainty
LICs	: Low Income countries
VAT	: Value Added Tax
PT	: Public Transport Ltd
NOX	: Nitrogen Oxides
COR	: Conservation Of Resource
SPSS	: Scientific Package for Social Sciences
ANOVA	: Analysis of Variance

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CHAPTER 1. GENERAL INTRODUCTION

1. Introduction

This chapter provides basic information on the background of the study, Problem statement, Research objectives, Research questions, and hypothesis, Scope of the study, significance of the study and structure of thesis. The basic of the study the impact of Covid-19 on public transport in Rwanda.

1.1 Background of the study

The COVID-19 pandemic poses a great challenge for contemporary public transportation worldwide, resulting from an unprecedented decline in demand and revenue. In this paper, we synthesize the state-of-the-art, up to early June 2020, on key developments regarding public transportation and the COVID-19 pandemic, including the different responses adopted by governments and public transportation agencies around the world, and the research needs pertaining to critical issues that minimize contagion risk in public transportation in the so-called post-lockdown phase (Baker, 2020).

The outbreak of the COVID-19 pandemic dramatically affected the world's population in early 2020. Mobility was particularly affected, since several governments imposed restrictions, as lockdowns, remote working and closure of shops. Moreover, people tried to reduce their movements and social contacts, to reduce the risk of a contagion. Public transport suffered particularly from the pandemic, since passengers may perceive the system as unsafe and a possible source of infection (Aloi et al., 2020).

Urban travel has declined all over the world, but not uniformly for all modes; public transportation has taken the hardest blow, as shown by survey-based data (Molloy, 2020). This was in some cases accompanied by a reduced service supply and exacerbated by the perception of public transportation as riskier than private or personal means of transport because of the closer contact to other people that is possible, sometimes unavoidable, in public transportation vehicles and stations. Figure 1 shows the variation on the use of public transportation hubs based on Google Mobility Reports data (authors own elaboration). The baseline for the data is the median value for the corresponding day of the week, during the five-week period between January 3 and February 6, 2020 (Campisi, 2020).

At the end of 2019, a new coronavirus, identified as SARS-CoV-2, was detected in Wuhan, China, which causes a disease called COVID-19 On 9th March 2020 in Italy, the second outbreak of the virus was detected, leading to mobility restrictions, school closures and measures such as social distancing The virus quickly spread to other cities and regions in Asia, Europe, Africa, North America and Latin America (Charoenwong, Kwan, & Pursiainen, 2020)

On 11 March 2020, the World Health Organization (WHO) declared this virus as a pandemic, leading governments to take measures to promote changes in mobility, the way people work and social relations (Scorrano & Danielis, 2020). However, as a result of these actions, there have been closures of businesses and offices; the prohibition of travel that is not strictly necessary, and even a compulsory quarantine at home has been imposed (Baldwin & Weder di Mauro, 2020). Its rapid spread led to congestion in health systems and the introduction of restrictions on people to slow down the rate of infection and death. This brought limitations to economic activities and a contraction of the gross domestic product (GDP) of the different economies of the countries (Campisi, 2020).

The rapid spread of COVID-19 led to considerable deaths and causalities throughout the world, and forced the governments to take several precautionary measures to contain the spread of the virus. These measures included (I) ban on unnecessary travel, (ii) adherence to social distancing norms, (iii) closure of schools, offices, restaurants, shops, and international borders, (iv) encouragement to work from home, etc. These measures impacted urban transport, logistics, tourism, international travel and freight transport, which in turn affected the economy (Lee, 2021).

The use of public transport around the world was significantly reduced due to the need to safeguard health and avoid an increase in the number of infections, leading to growth in the use of private vehicles as a means of transport. Indeed, the pandemic has harmed mass transport, such as buses and subways, as users decided to use private means of transport, such as bicycles and other soft means of transport, adapting routes for these means of transport and walking (Aloi, 2020).

To slow the spread of the virus, most countries in Europe adopted measures that were intended to decrease social contact in everyday life. These measures affected the transport networks in general, as well as mobility behavior in particular (Bucsky.P, 2021).

East African countries and cities have been forced to act fast in implementing travel-related measures without always fully understanding their effects on propagation risks, economic and social consequences, or on people's well-being, even though needs for such insights exist (Phillips, 2020).

Like all other countries on the African continent and the globe at large, Rwanda is equally battling the outbreak of the COVID-19 pandemic. Almost all sectors in the country have been

affected, ranging from transportation, education, and public works to the daily operations of businesses like selling, retailing, and so forth (Umutoni, 2021).

Like in others countries across the world various measures against Covid-19 were taken in Rwanda and some of them affected transport sector particularly. Taking a look on the first lock-down it is clear that unnecessary movement and visits outside the home were not permitted expect for the essential services such as healthcare, food shopping or banking and for the personnel performing such service. And what we can note here is that public transport was not allowed during the time. Even after lockdown to drivers of bus were asked to leave some sitting place to ensure that the measure of social distancing is kept, however the cost of fuel; car maintenance as well as other related transport expenses were not reduced which in turn negatively affect financial conditions of JALI TRANSPORT LTD particularly as the case of the present study and big transport company in Rwanda experienced these negative effects of Covid-19.

1.2. Problem statement

The transportation and logistics sector has been faced and till today face challenges as a result of the unpredicted outbreak of the COVID-19; it has experienced some setbacks affecting its operation such as the strict import and export restrictions, reduction in the demand for passengers' travels, changing the customer relationships situation of transportation companies during the COVID-19 pandemic, etc. (Karaman, 2020).

According to Luman, (2021) the impact of COVID-19 on the global transportation and logistics sector, which includes aviation, freight, and logistics services, was quite severe. A dropdown of about 10% in global capacity in 2020 has been recorded due to the global economic crisis (5%).

As a result of the social distance, regulations had also significantly affected passenger traffic. However, with the possibility of the vaccination, the current ease of travel restrictions could result in a predictable 7% rebound in 2021. He furthermore, noted that public transportation will take several years to recover from the impact of COVID-19; and with the remote work and travel regulation, the demand for public transportation would possibly remain below 2019 levels even after economies fully re-open. Another negative impact is on the increased costs incurred from state grants given to industries during the pandemic.

Back to Rwanda, despite of various efforts made by government of Rwanda such as the economic recovery fund (ERF) and the ways it encouraged banks to be flexible in renewing the loans contracts to enable business owners to payback the loans they took before Covid-19 pandemic, public transport sector till now are facing various challenges resulted by this pandemic. Among them we can say the fail of their long-term plan; fail in meeting customer expectations as well as paying unpredicted interest on banks' loans as results of delayed payment of some installments because of Covid-19.

Ho et al. (2021) investigated the impact of COVID-19 on freight transport, with a specific focus on China. It was shown that COVID-19 has a negative impact on China's road freight transportation turnover as the number of confirmed cases of COVID-19 increased, which has resulted in emergency stockpiling and mismanagement of vital resources and facilities, instability in market supply and demand, and changes in consumer purchasing and consumption patterns, such as increased fears and declining investment.

Parady et al (2020) evaluated factors affecting travel behavior during the outbreak of COVID-19 in the Kanto region including Tokyo metropolis and found an appreciable decline in activity

levels. Additionally, they reported severe reduction for leisure activities, eating out and moderate reduction for grocery shopping.

The present study focus on the effects of covid-19 on public transport in Rwanda, few study were done on this matter such as one done by Ho et al. (2021) who investigated the impact of COVID-19 on freight transport, with a specific focus on China; by Parady et al (2020) evaluated factors affecting travel behavior during the outbreak of COVID-19 in the Kanto region including Tokyo metropolis. But none of them were carried in Rwanda; however Rwandan public transport faced various negative effects also resulted by Covid-19. On the other side in this study researcher intend to fill the gap by investigating the effects of covid-19 on one of the biggest public transport company in Rwanda which is JALI TRANSPORT LTD. The existing review studies lacked a detailed analysis regarding road transport during COVID-19. Therefore, this study contributed by conducting a comprehensive review in the domain of road transport to identify some research gaps and propose future research directions.

1.3. Research questions

1. What are the impacts Covid-19 on the transport activities of JALI TRANSPORT LTD?

2. Does JALI TRANSPORT LTD record a financial Performance within the period of 2017-2021?

3. What are the impacts of Covid-19 on JALI TRANSPORT LTD performance?

1.4 Research objectives

The researcher conducted this research with the following objectives which are classified into general and specific objectives.

1.4.1. General research Objective

The general objective of the study is to investigate the impact of Covid-19 on Public transport in Rwanda.

1.4.2. Specific Objectives

1. To assess the impacts Covid-19 on the transport activities of JALI TRANSPORT LTD;
2. To assess the financial performance of JALI TRANSPORT LTD within the period of 2017-2021
3. To examine the impacts of Covid-19 on JALI TRANSPORT LTD performance;

1.5. Hypotheses

A hypothesis is an assumption or idea that is proposed for the sake of argument so that it can be tested to see if it might be true (Borg, 2017). Therefore, for the purpose of analyzing the data, researcher selected the following hypotheses:

$\boldsymbol{H_1}$: Covid-19 has an impact on JALI TRANSPORT LTD's public transport activities.

$\boldsymbol{H_o}$: Covid-19 has no impact on JALI TRANSPORT LTD's public transport activities.

1.6. Scope of the study

This research presents a very big study on matters of concern with the impact of Covid-19 on Public transport in Rwanda, but due to the problem of time, material as well as financial means research is scoped in time, geographic scope and domain.

1.6.1. Scope in time

This research took a time frame of five years from 2017-2021. Through this researcher divided this period into two parties from 2017-2018 was used to measure the situation before Covid-19 and from 2019-2021 was used to assess how was the situation during Covid-19.

1.6.2. Scope in domain

This study focused in domain of Covid-19 impacts on business activities. It mainly focused on its effect on three main issues which are: long-term plan, profitability as well as employees' motivation in JALI TRANSPORT LTD.

1.6.3. Geographic scope

This research took place in Kigali city where JALI TRANSPORT LTD operates

1.7. Significance of the study

Under this section, the researcher would like to present how this research (study) is important to different stakeholders including researcher himself; future researchers; community and JALI TRANSPORT LTD itself.

Personally this will help researcher to acquire knowledge and experience in writing a report on research and it will serve to partially fulfillment of requirement for award of Master's Degree in Business administration.

Scientifically, this work is an added value to scientific world that it provides an exhaustive documentation to the future researchers and Business Administration students in their research by just using it as reference.

Rwandan community in general, educators, researchers and business policy makers would benefit from information given by the researcher on this case. Particularly, the study will help the board and management of JALI TRANSPORT LTD to understand more on the Covid-19 on company's long-term plan, profitability as well as on employees' motivation. It will also provide ideas to managers of public transport in Rwanda and other shareholders on the possible strategies and way-forward to reduce the negative impacts of Covid-19 on Rwandan transportation industry.

1.8. Definition of key concepts

Under this section, the researcher would like to present the definition of key concepts including transport; public transport company and Covid-19.

1.8.1 Transport

Transportation is the movement of goods and persons from place to place and the various means by which such movement is accomplished. The growth of the ability and the need to transport large quantities of goods or numbers of people over long distances at high speeds in comfort

and safety has been an index of civilization and in particular of technological progress (Davis, 2017).

Transportation is a movement of goods and personnel from one place in a route between two destinations, which has been either paved or worked on to enable transportation by way of motorized and non-motorized carriages (Litman, 2019).

Transport is the movement of a single type of goods or persons from one place of origin, where they are loaded, to a destination (Beaudoin, 2018).

1.8.2 Public transport

Public transport is any regularly scheduled mode of transportation provided and operated by a duly licensed carrier and meant for the local public interest to move around and which is recognised by respective countries (bus, ferry, hovercraft, hydrofoil, ship, train, tram or underground train). This excludes all modes of transportation that are chartered or arranged as part of a tour, even if the services are regularly scheduled. Common air carrier is treated as Public Transport in this policy (Calimente, 2016).

Public transport is a system of transport for passengers by group travel systems available for use by the general public unlike private transport, typically managed on a schedule, operated on established routes, and that charge a posted fee for each trip (Needham, 2018).

Public transport means any land, sea or air conveyance which has fixed and established routes only and is operated under a license issued by a governmental authority having jurisdiction, for the transportation of fare paying passengers. This excludes rented vehicles, vehicle on hire, taxi

services, private hire cars, buses, coaches and all modes of transportation that are chartered or arranged as part of a tour even if the services are regularly scheduled (Spieler, 2021).

1.8.3 Covid-19

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China (Tardivo, 2020).

Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China (Beck, 2020).

Covid-19 is a highly contagious respiratory disease caused by the SARS-CoV-2 virus. SARS-CoV-2 is thought to spread from person to person through droplets released when an infected person coughs, sneezes, or talks. It may also be spread by touching a surface with the virus on it and then touching one's mouth, nose, or eyes, but this is less common (Jonas, 2021).

1.9 Structure of the thesis

The study is organized into five chapters; where the first one is concerning with the background to the study, statement of the problem, research question, objectives of the study, significance of the study, scope of the study, definition of the key concepts and lastly how the whole study is organized.

Chapter two deals with the literature review, where this chapter examines the views of other theorists and authors as well as theoretical framework, empirical and critical review and research gap identification.

Chapter three research methodologies which outlined the research techniques and methods that the researcher employed in carrying out the data collection; the chapter also deals with the study area, population and the sample size selection of the study as well as methods of data analysis.

Chapter four presents the analysis and presentation of data in this study.

Chapter five as the final chapter of this study presents the summary, conclusion and the necessary recommendations.

CHAPTER 2. LITERATURE REVIEW

2.0. Introduction

This chapter reviews the literature pertaining to the research objectives, which has been put forward by other authors. It emphasizes on key terms and generalities that help to understand the nature and significance of the research. It also identifies the gap in the existing literature consulted on the impact of Covid-19 on public transport.

2.1 Concepts review

Under this section, the researcher presents the conceptual literature related to the main variables of this research, including the concepts of covid-19 and the concepts of public transport as follows:

2.1.1. Covid-19

The outbreak of the COVID-19 pandemic dramatically affected the world's population in early 2020. Mobility was particularly affected, since several governments imposed restrictions, as lockdowns, remote working and closure of shops. Moreover, people tried to reduce their movements and social contacts, to reduce the risk of a contagion. Public transport suffered particularly from the pandemic, since passengers may perceive the system as unsafe and a possible source of infection (Aloi et al., 2020).

Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) outbreak was first reported in Wuhan, China in December 2019 leading to a global pandemic (declared by the World Health Organization or WHO on 11 March 2020) called COVID-19 disease. Around mid-January 2020

imported cases of COVID-19 appeared in other Asian countries such as Thailand, Japan, Republic of Korea, Singapore and thereafter the virus quickly spread to around 56 countries. Since then, millions of people have been quarantined in one of the history's largest pandemics. The spread of the COVID-19 outbreak since December 2019 has been traumatic in the global scale. Due to globalization, the pandemic has spread to almost everywhere in the world and its socio-economic impact shook every corner of the globe. As of 9 November 2020, approximately 1,264,147 people have died from the coronavirus COVID-19 outbreak (Dipanju, 2020).

2.1.1.1 The COVID -19 Pandemic and Interconnected Global Economy

Since the Covid-19 epidemic outraised, there has affected millions of people and claimed the lives of more than three hundred thousand people around the world. Likewise, the current Covid-19 epidemic has affected all walks of life and businesses in several ways, including a sharp drop in domestic demand, supply disruptions, a reduction in tourism and travel. Scarcity of trade and production and impacts on health (Abiad, 2020).

Even the pandemic has become the primary concern for the survival of humanity in the world. While the devastation of the Covid-19 pandemic is still elusive, defeating this pandemic requires coordinated efforts globally to build a resilient and sustainable public health system and an economic system to recover (Mohammad, 2020).

However, it is certainly a global crisis because no country is immune to this health and economic disaster. Among the interconnected indicators, the episode of global health increased the participation rate and affected all other factors of globalization linked to the international. China's global role and large-scale trade in the world are important contributors to the spread of

the Covid-19 pandemic (Werning, 2020). In addition, the global health and economy, among others, are being hit hard by the Covid-19 pandemic, as it is the boom and the trap of globalization. This global health issue comes with a high degree of uncertainty, such as longer quarantines, travel restrictions, closures of non-essential restaurants and businesses, social remote ordering, lockdowns, and more. Regarding the severity, magnitude and extent of the problem. Consequences of the Covid-19 pandemic. Thus, global health risks and economic consequences are certainly the consequences of globalization and the entire nation must do everything in its power to address them. Public health crises, infections and diseases, and innovation in therapeutic medicine and vaccines go beyond individuals and their families to involve and influence entire societies, their institutions and their global interrelations and estimations (Kohlscheen, 2020).

2.1.1.2 Covid-19 and Economic Policy Challenges

Over the course of the pandemic and economic crises, policymakers have had to adjust to the changing nature of the crises, while implementing targeted policies that address what had been expected to be short-term problems without creating distortions in economies that can outlast the impact of the virus itself. Initially, policymakers were overwhelmed by the quickly changing nature of the global health crisis and the immediate economic effects. The extended health crisis, however, created wide-ranging spill-over effects beyond those typically associated with monetary and fiscal policies in ways that have hampered national economic recoveries and reinforced a more wide-spread global trade and economic crisis. During the initial stages of the pandemic, policymakers weighed the impact of policies that addressed the immediate economic effects at the expense of longer-term considerations such as debt accumulation. Initially, many

policymakers felt constrained in their ability to respond to the crisis as a result of limited flexibility for monetary and fiscal support within conventional standards, given the broad-based synchronized slowdown in global economic growth, especially in manufacturing and trade, which had developed prior to the viral outbreak (Jackson, 2021).

2.1.1.3 Quantitative macroeconomic impacts

As the pandemic unfolds, many researchers have been thinking about the economic impact from a historical perspective. Ludwigsen et al. (2020) try to quantify the macroeconomic impact of costly disasters (natural and man-made) and translate them into estimates of the impact of COVID-19. They find that in a fairly conservative scenario, pandemics, such as COVID-19, are tantamount to large, multiple-period exogenous shocks. Using a "costly disaster" index, the authors find that COVID-19 is constituted of multi-period shocks in the United States, which leads to a 12.75% drop in industrial production, a 17% loss in service employment, sustained and drastic reductions in air travel, and macroeconomic uncertainties which linger for up to 5 months.

Jordà et al. (2020) analyze the rate of return on the real natural interest rate (the level of real returns on safe assets resulting from the demand and supply of investment capital in a non-inflationary environment) from the 14th century to 2018. Theoretically, a pandemic is supposed to induce a downward negative shock to the real natural interest rate. This is because investment demand decreases due to excess capital per labor unit (i.e., a scarcity of labor being utilized), while savings flows increase due to either precautionary reasons or to replace lost wealth. The authors find that the natural rate of interest may be about 2 percentage points lower than it would

otherwise have been some 20 years after the pandemic, and only return to counterfactual levels after 40 years.

Analysis based on historical data, however, might not be relevant in this case. According to Baker et al. (2020), COVID-19 has led to massive spikes in uncertainty, and there are no close historical parallels. Because of the speed of evolution and timely requirements of data, the authors suggest that one should utilize forward-looking uncertainty measures to ascertain its impact on the economy. They formulate the uncertainty measure from the Standard & Poor's 500 Volatility Index (VIX) and the news-based economic policy uncertainty (EPU) index developed by Baker et al. (2016).

Coibion et al. (2020) use surveys to assess the macroeconomic expectations of households in the United States. They find that it is primarily lockdowns, rather than the infections themselves, that lead to declines in consumption spending and employment, lower inflationary expectations, increased uncertainty, and lower mortgage payments being made.

2.1.1.4 Effect of Covid-19 on African economies

As the COVID-19 pandemic accelerated, Socio-economic damage was increasing in Africa and all over the world. However, the curve of the pandemic within and outside the continent is flattening gradually in some individual countries while rising in others. Accordingly, as of 7 March 2021, about a year after the first coronavirus was detected in Africa, the total number of confirmed COVID-19 cases had reached 116,830,061 globally, the majority of which (30.2%) occurred in Europe, followed by North America (28.6%), Asia (21.9%), South America (15.9%) and Africa (3,964,055 or 3.4%). It must be noted that though Africa's reported confirmed cases

(see Figure 1) are the lowest globally, testing has been extremely low in the continent (John, 2021).

The COVID-19 pandemic and the measures deployed by governments and private sector institutions to contain its spread lockdowns, quarantines, social distancing, travel bans and restrictions, masking requirements, shutdowns of non-essential activities—have caused severe socio-economic dislocations on African economies. Many African governments responded with programs to mitigate personal hardship and disruptions to economic life. At the same time, central banks have cut policy rates and injected liquidity on an extraordinary scale in the economies. Therefore, it is not surprising that the pandemic and the actions taken to contain it have exerted substantial costs on African economies, including deep economic contractions. Specifically, some of the socioeconomic impacts of the COVID-19 pandemic are enumerated below (John, 2021).

2.1.1.5 The Economic Impact of Covid-19 Pandemic in Rwanda

Rwanda is a low-income African country, with a population of about 13 million people. It reported its first covid-19 case on 14th March 2020. On the same day, it introduced restriction measures, such as school closures and a ban on public gatherings. A week later, on 21st March 2020, the government announced a national lockdown that further restricted all movement and introduced a requirement for all but essential workers to work from home. These measures were strictly enforced and lasted until early May 2020. They were implemented very early on, with the aim of preventing an uncontrolled spread of the pandemic. This prompt reaction is in line with decisions made in other LICs (Giulia, 2022).

Despite the relatively low incidence of cases, Rwanda is projected to experience severe losses in economic activity and tax revenue. A recent report based on historical administrative data from past corporate income tax returns estimates the economic effects of the crisis on Rwandan corporations, using two scenarios with lockdowns lasting for three or five months (Lees et al., 2020). For the three months' lockdown scenario, these projections suggest that just 55% of firms remain profitable, compared to 72% of firms in the baseline scenario pre-covid-19. The resulting losses in sales that the authors calculate also imply large losses in payroll for employees (5.2%) and in tax revenue for the government (25%). The results we present in this paper complement these estimates by showing the actual impact of the crisis, based on sales reported in VAT declarations (Giulia, 2022).

2.1.2 Public transport

Public transport (PT) in urban areas has gained greater attention in recent years for improving sustainability and the quality of urban life. The economic and environmental performance of cities can be enhanced by connecting resources to destinations effectively and facilitating mass mobility (Kwon, 2016).

Service access and urban public transport accessibility have always been a major service issue in urban public transport. In network design of transit services, researchers are often more focused on minimizing the user and operator cost rather than incorporating the issues of equity and access (Berwick, 2013). Availability of infrastructure, ease of information, reduced time and cost are imperative factors in providing an attractive public transport with door to door access as well as the long-distance travel (Budiloviča, 2017).

Since the lack of access to transportation leads to social exclusion, transport and land use policies focus on accessibility and aim at enabling people to reach destinations at reasonable costs and times (Abulibdeh., 2016). Therefore, providing efficient public transport in terms of accessibility is one of the main objectives of policy makers and planners in metropolitan areas throughout the world (Thompson, 2016). But, transport accessibility during the covid-19 period had been discouraged through to different measures taken against this pandemic. This, is the case in Rwanda because during the period through to social distancing measure the accessibility of public transport was not easy and on the other hand public transport company like JALI TRANSPORT LTD face the problem as they spend more on fuel compared to the generated income.

2.1.2.1 Public transport Perceived accessibility

Perceived accessibility is a measure of living a satisfactory life using public transportation. The aim of perceived quality is to apprehend the subjective measures which are based on the user perception, incorporating with subjective measures which refer to the quantitative measures of predetermined parameters (Olsson, 2016).

Abreha, (2007) proposed to consider the perceived accessibility in public transport as a complementary measure to conventional objective measures of accessibility by capturing the subjective element of accessibility, as opposed to conventional accessibility that is based on the same objective attributes for large areas or groups of people. They developed a measure of perceived accessibility by running a four items self-reported questionnaire from the users of public transport. The investigated items were as follows:

- It is easy to do (daily) activities with public transport.

- If public transport was my only mode of travel, I would be able to continue living the way I want.
- It is possible to do the activities I prefer with public transport.
- Access to my preferred activities is satisfying with public transport.

He furthermore suggested to use this measure of perceived accessibility in order to determine the traveler's (or possible travelers) opinion of accessibility in transport planning or accessibility-mapping, or for directing interventions aimed at improving accessibility to where they are best needed according to the individuals.

Evaluation of perceived accessibility provides a strong ground to complement theory on accessibility with subjective experiences of travelers to provide realistic basics in actual accessibility indicators (Wee, 2016).

2.1.2.2 Public transport accessibility and Public health

Public transport planning generally studies health impacts of public transport as a subordinate importance. Public health indicators for transport are considered as an issue with limited importance and often unheeded such the emission rate of the vehicle, crashes, basic mobility benefits and mental health in the process of economic analysis. Time to access and egress the PT has been treated as a disutility and 'penalty' in the past. Due to the ignorance, importance of the impact of transport to promote incidental active travel by reaching from the public transport to the destination (access and egress) for health was not considered effectively (Shiftan, 2016).

A recent study in 2018 studied the effects of unavailability of public transport in Barcelona over the air pollution and found that during the public transport strikes, level of NOX was increased between 4.4 % and 7.1 % and the same trend was recorded for the black carbon in air. In other

words, the access to public transport has consequences on the air quality and health (Querol, 2018).

2.1.3. Review on Job security

Job security is defined as the assurance in an employee's job continuity due to the general economic conditions in the country (James, 2012). It is concerned with the possibility or probability of an individual keeping his/her job (Adebayo and Lucky, 2012). It deals with the chances of employees keeping their jobs in order not be unemployed (Simon, 2011). Jobs which are not backed by indefinite contract or cannot be guaranteed for reasonable period are deemed to lack job security. It is also seen as the employees free from the fear of being dismissed from his/her present employment or job loss. Some professions and employment activities have greater job security than others. Job security is an employee's assurance or confidence that they will keep their current job for a longer period as they so wish (businessdictionary.com). It is the assurance from the company or organization that their employees will remain with them for a reasonable period of time without being wrongly dismissed (Adebayo and Lucky, 2012; Simon, 2011).

Quite a number of factors such as employment contract, collective bargaining agreement, labor legislation and personal factors such as education, work experience, job functional area, work industry, work location, etc., play an important role in determining the need for an individual's services and impacts their personal job security (Adebayo and Lucky, 2012). In another extreme, essential or necessary skills and past experience required by the employers and subject to the current economic condition and business environment could also guarantee individual's job security (Adebayo and Lucky, 2012).

Generally, certain type of jobs and industry jobs has been perceived to have high job security. For instance, government jobs, educational jobs, healthcare jobs and law enforcement jobs are deemed to be very secure while on the other hand, jobs in the private sector are widely perceived to offer lower job security which may also be according to industry, location, occupation and other factors (Adebayo and Lucky, 2012). However, in the final analysis, Adebayo and Lucky (2012) noted that people's job security eventually depends on whether they are employable or not and if businesses have a need for their skills or not. Although, employment laws can offer some relief against unemployment risk, they only have a marginal contribution to the job security of individuals. The fact remains that, individuals need to have the right skill set to have good job security.

2.1.4. Review on employees' capacity building

Capacity building has different meanings and interpretations depending on who uses it and in what context it is used. It is generally accepted that capacity building as a concept is closely related to education, training and human resource development. This conventional concept has changed in recent years towards a broader and more holistic view, covering both institutional and country specific initiatives (Williamson, et al, 2003).

According to United Nations Committee of Experts on Public Administration (2006), capacity building takes place at three levels, that is, at the individual level, an institutional level and the societal level. Capacity building on an individual level means the development of conditions that enable individuals to build and enhance existing knowledge and skills. Additionally, it requires the conditions that will allow individuals to engage in the process of learning and adapting to change (UNCEPA, 2006).

Joyce and Glynn (2019) found that a particular employee development approach, given time and support for full implementation, had direct, dramatic effect on performance. Further studies of this type are needed to support what is generally believed to be true. Employee development can and does have impact on staff performance. There is virtually no question that effective development programs do change the performance of employees. Whether training program, individual inquiry or any other model outlined earlier, employee development continues to be a critical element that contributes to worker effectiveness and overall performance improvement.

According to Bratton and Gold (2003) comprises the procedure and processes that purposely seek to provide learning activities to enhance skills, knowledge and capabilities of people, teams, and organizations so that there is no change in action to achieve the desired outcomes. It is literally impossible today for any individual to take on a job or enter a profession and remain in it for years with his skills basically unchanged. Employee training and development is not only desirable but it is an activity which management must commit human and fiscal resources if it is to maintain a skilled and knowledgeable personnel. Personnel training and development is a process of altering employee's behaviour to further organizational goals.

2.1.5. Review on Business expansion

Business growth can be studied from different perspectives. According to Davidsson and Wiklund (2006), the resource-based perspective, the motivation perspective and the strategic adaptation perspective focus on factors leading to survival and growth, while configuration studies are concerned with how growing organizations should be managed. The configuration perspective can also be called the stages of growth perspective or the company life-cycle perspective; in this study, the term configuration perspective is used.

Miller and Friesen (2014) are among the first authors to use the term configuration in this sense, stating, ‘there is [a] somewhat “gestalt” or configural nature to the phases of the life-cycle. When we classify periods of organizational history according to their phase using a few key typing attributes, many other aspects of the organisation and its environment can be predicted—they reflect the themes delineated for each phase by the conceptual literature on the lifecycle.’ Miller, Friesen, and Mintzberg (2004) and Hanks, Watson, Jansen, and Chandler (1993) agree that life-cycle stages are best characterized as configurations. According to this view, the key typing attributes (for example, structures, systems, information procedures, etc.) tend to influence each other in such a manner that gives rise to a small number of configurations representing common developmental or transitional sequences.

2.1.6. Review on meeting expected loan repayment period

Loan repayment is the act of making payments on a loan. This can be done monthly, lump sum, or a combination of both. Loan repayment is essential because it allows borrowers to pay off their debt and improve their financial situation. Making timely loan repayments can also help borrowers build a positive credit history, making it easier to qualify for future loans. In addition, repaying loans can help reduce stress and anxiety levels and improve one's overall financial well-being. Assuming all other factors are equal, repaying a loan in full and on time is always the best option. However, life happens, and sometimes borrowers may find themselves in a position where they can't make payments. In these cases, it's essential to contact the lender as soon as possible to discuss options for deferring or modifying the loan (Kim, 2015).

Loan repayment can seem daunting, but it is essential to remember that you have options. If you are having trouble making payments, you can contact your lender to discuss your options. You may be able to extend the loan term, which will lower your monthly payments. You may also be

able to refinance the loan, which could lower your interest rate and monthly payments. (Ulwodi, 2017).

2.1.7. Review on profitability

James Clausen (2019), He state that the Profitability Ratio Analysis of Income Statement and Balance Sheet Ratio analysis of the income statement and balance sheet are used to measure company profit performance. He said the learn ratio analyses of the income statement and balance sheet. The income statement and balance sheet are two important reports that show the profit and net worth of the company. It analyses shows how the well the company is doing in terms of profits compared to sales. He also shows how well the assets are performing in terms of generating revenue. He defines the income statement shows the net profit of the company by subtracting expenses from gross profit (sales – cost of goods sold). Furthermore, the balance sheet lists the value of the assets, as well as liabilities. In simple terms, the main function of the balance sheet is to show the company's net worth by subtracting liabilities from assets. He said that the balance sheet does not report profits, there's an important relationship between assets and profit. The business owner normally has a lot of investment in the company's assets.

Cohen (2021)In order to evaluate and indicate the performance of a company, the economic analysts refer to some indicators, such as growth of sales / sales volume, the effectiveness of competition, the result or income of the company; the effectiveness of the system as a whole etc. Therefore, for assessing well the performance of any institution the following measures are commonly used:

2.1.7. 1.Net profit margin or rate of return on sales

According to Cohen (2021) commercial viability relates to the pricing policy applied by the company and the margin it takes on goods and services. It is expressed by the ratio of the net profit on sales

$$\textbf{Net profit margin} = \frac{\textbf{Net profit}}{\textbf{Sales}} \times \textbf{100}$$

Gross profit mark up, margin and net profit margin show how well a business is doing in terms of profit earned from trading and the whole business activity.

This is a ratio that expresses the co's net margin or simply the index of profitability of the company.

This ratio is an economic indicator that is great importance because it measures the profit earned by the company for each monetary unit of sale. It also shows the market share customer loyalty new customer attraction, customer satisfaction, profitability by market segment, customer, product, market etc.

2.1.7. 2. Return On Asset (ROA)

It is obtained by comparing the total assets of the co. and the result expressing all company's activities. According to BERNARD and COLL, asset turnover is calculated as follow:

$$\textbf{Return On Asset(ROA)} = \frac{\textbf{Net income}}{\textbf{Total Asset}} \times \textbf{100}$$

2.1.7. 3. Return On Equity (ROE)

This involves the relationship between the net result for the period on the equity the shareholders have invested in the co. it express the ratio between net income and shareholders' equity this ratio is referred to as return on equity is a tool of financial analysis that interests most shareholders. It measures what their investment gives back to them.

$$\boldsymbol{Returnonequity}(\mathbf{ROE}) = \frac{\mathbf{Net\ income}}{\mathbf{Equity}} \times \mathbf{100}$$

2.2 Theoretical review

The theories, pertinent to covid-19 and public transport in this study are: Conservation of resource theory and Game theory. These are discussed below:

2.2.1 Conservation of Resource Theory

COR theory proposes that when an individual perceives that resources are threatened by loss, experiences the actual loss of resources, or does not obtain enough resources after making an appropriate investment in them, they will experience stress and decreased well-being (Hobfoll, 2001). The core concept of COR theory is resource. Hobfoll (1989) defined resources as valuable objects, personal characteristics, conditions, energies, or anything that can help a person gain more of the above mentioned resources. In developing of the theory, scholars have expanded the definition of resources to include anything that can help people achieve their goals (Halbesleben et al., 2014). The COR theory explains that environmental factor is an important factor threaten resource loss (Hobfoll, 1989). Environmental challenges the instrumental value and symbolic value of resources that can help people to gain more resources and define people who they are (Brown and Andrews, 1986). The dynamic and uncertain nature of the environment is the main reason that causes resource uncertainty (Adomako, 2021).

The COR theory has been widely used in many research situations, such as organizational situations, and health situations (Hobfoll, 2001). For example, some scholars used COR theory to explain how individual human capital can bring positive emotions to themselves through

entrepreneurship in disaster situations (Williams, 2016). Scholars also used COR theory to explain entrepreneurial behavior (Lanivich, 2015) and the consequences of entrepreneurial failure (Yu, 2020). COR theory combines a variety of perspectives to explain the relationship between entrepreneurship and well-being, such as the value creation perspective (Brieger, 2021) and work-family balance perspective (Leung, 2020). Acquiring, protecting, and developing resources are important mechanisms in COR theory to deal with resource loss, which explains why some people can deal with resource uncertainty (Adomako, 2021). This theory can also help us understand how the loss of resources affects people's mental health (Lanivich, 2015). Isolation, shutdown, and other activities during the pandemic greatly affect the preservation and acquisition of enterprise resources. Therefore, this study will adopt this theory while investigating the impact of Covid-19 on public transport in Rwanda.

2.2.2 Game theory

This is also a prediction theory (Von Neumann, 2007). Posited that games theory uses a set of rules and guidelines on how stakeholders respond to situation and information while relating or interacting with one another. Games theory assumes selfish choices are made during one-time interaction. But Bo, 2005 submitted that, continuous relationship among stakeholders will lead to cooperation, knowing fully well that selfish act will lead to future retaliation. Games theory has been applied to the adoption of new technology (Zhu, 2003) , decisions on distribution channels (Xia, 2013) and production quantities and optimal pricing (Gao, 2013). Based on the assumptions of Game theory, firms with the objectives of competing are likely to cooperate during Pandemic because of the implication of the high cost of defection (Graighhead, 2020).

2.3 Empirical review

Ho et al. (2021) investigated the impact of COVID-19 on freight transport, with a specific focus on China. It was shown that COVID-19 has a negative impact on China's road freight transportation turnover as the number of confirmed cases of COVID-19 increased, which has resulted in emergency stockpiling and mismanagement of vital resources and facilities, instability in market supply and demand, and changes in consumer purchasing and consumption patterns, such as increased fears and declining investment.

Subramanya and Kermanshachi (2021) analyzed the impact of COVID-19 on the transportation industry with a comparative study of transportation modes such as road, air, and rail transportation. COVID-19 has severely affected all forms of transportation based on the supply and number of travel passengers

Wilbur et al. (2020) analyze bus ridership in Nashville and Chattanooga, TN, USA, and find the largest drops during the morning and evening commutes, with large differences between the highest-income areas and lowest-income areas in Nashville (77% vs 58% drops).

Almlöf et al. (2020) analyze the propensity to stop travelling by public transport during COVID-19 for the individual holders of 1.8 million smart cards in Stockholm, Sweden, combined with demographic data at the zonal level. The results show that education level, income, age as well as workplace type are strong predictors.

Aloi et al (2020) investigated the effect of COVID-19 lockdown and restrictions on urban mobility in Santander, Spain. According to the authors, total mobility has decreased by 76 percent, with public transportation users down by 93 percent. They also reported that the

lockdown altered the motivation for travelling and done on a need basis with travel to work being the most essential reason.

Lee et al. (2020) investigated human mobility trends by juxtaposing the day-by-day disparities across the United States. According to the authors, a significant number of people have reduced their everyday movements since the outbreak. Moreover, the percentage of people staying at home rose rapidly from 20% on normal days to 35%; out-of-county trips decreased from 28% to 23%.

Parady et al (2020) evaluated factors affecting travel behavior during the outbreak of COVID-19 in the Kanto region including Tokyo metropolis and found an appreciable decline in activity levels. Additionally, they reported severe reduction for leisure activities, eating out and moderate reduction for grocery shopping.

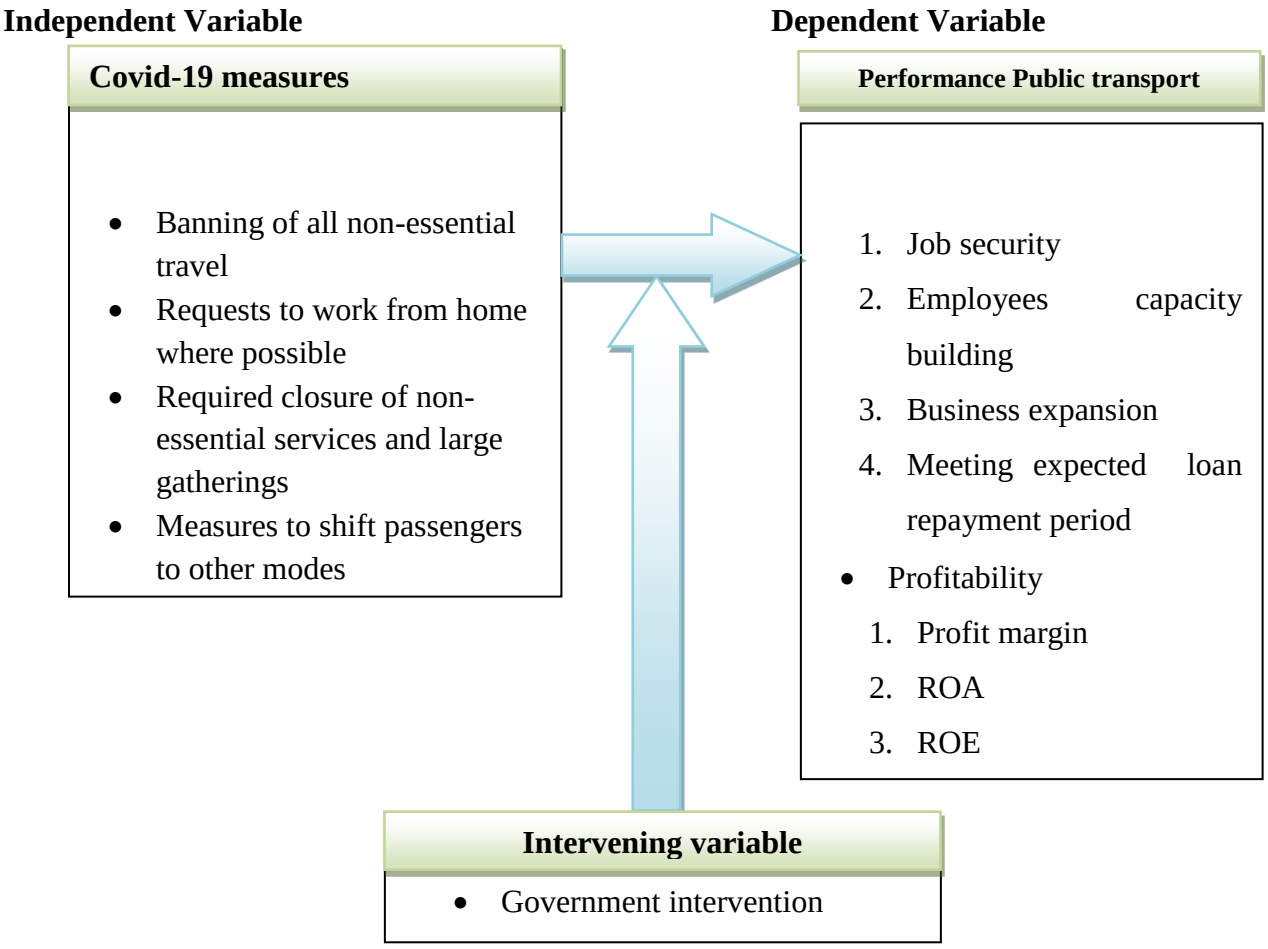
2.4 Research gap

The present study focus on the effects of covid-19 on public transport in Rwanda, few study were done on this matter such as one done by Ho et al. (2021) who investigated the impact of COVID-19 on freight transport, with a specific focus on China; by Tan and Ma (2021) the effects of customer behavior visa- avis public transport as the effect of Covid -19. But none of them were carried in Rwanda; however Rwandan public transport faced various negative effects also resulted by Covid-19. Therefore, in this study researcher intend to fill the gap by investigating the effects of covid-19 on one of the biggest public transport company in Rwanda which is JALI TRANSPORT LTD.

2.5. Conceptual framework

The graph hereafter, represents the independent and dependent variables. Since there are many variables, the researcher shall concentrate on three most important variables such as Independent variable, Dependent variable and Intervening variable. This conceptual framework interlinks those three variables following their interdependence. The below given Conceptual framework, it is clear that Covid-19 as Independent variables has negative effects on public transport as main Business activity of JALI TRANSPORT LTD

Figure2. 1. Conceptual Framework



Source: Researcher's design

CHAPTER 3. RESEARCH METHODOLOGY

3.0. Introduction

This chapter details the general methodology that researcher used to conduct the study. The chapter comprises of the research design, target population, sample design, data collection method and data analysis as well as reliability and validity measures.

3.1 Research Design

Research design outlines how the research was undertaken. It specifies the methods and procedures that were used to collect and analyze data (Borg, 2007). Therefore, this research adopted descriptive; explanatory and exploratory research design. Researcher used descriptive to describe variables and determine frequency with which something occurs or relationship between the variables of this study. Explanatory design helped researcher to explain the effects of Covid-19 on public transport with a case of JALI TRANSPORT LTD. And exploratory design helped researcher to gather preliminary information that help to define problems and recommend solution.

3.2 The population of the study

Population refers to the total collection of elements about which one wishes to make some inference and an element represents each member of the population (Cooper, 2013). Therefore, for this study the target population to whom researcher conducted this study is 41 employees of JALI TRANSPORT LTD from different departments. Additional to this researcher consulted

some report from JALI TRANSPORT LTD to detect the performance of this company before and during the covid-19 pandemic.

3.3 Sampling design

A sample is a set of entities drawn from a population with the aim of estimating characteristic of the population (Yates *et al.*, 2008). Cooper, (2013) explain that the basic idea of sampling is selecting some of the elements in a population, so that the same conclusions can be drawn about the entire population. This results in reduced cost and greater accuracy of results. During the present study, researcher adopted universal sampling techniques and carry out the research to the all population because is small so that he can reach to every one of them.

3.4 Data Collection Instruments and Procedures

Researcher will use both primary sources and secondary sources of data in this study. Empirical data will be collected from different sources to ensure their reliability and validity. Researcher will collect primary data through structured interviews, questionnaires and observations while secondary data will be obtained through documentary review.

3.4.1 Questionnaire

A questionnaire is a set of questions or statements that assesses attitudes, opinions, beliefs, and bio-graphical information. In order to collect data that precisely meets the objectives of the study, both open-ended and closed-ended questions were included in the questionnaire (Kombo and Tromp, 2006). Therefore, in this case researcher printed a set of questions and distribute

them to the selected respondents. Researcher choose questionnaire because of how it saves time and allows easy analysis of collected data.

3.4.2. Structured interview

Interview is an instrument that aims at organizing a report of oral communication between two people interviewer and the interviewee in order to allow the investigator to collect same recorded in order to capture the answers quickly and not wasting respondents' time (Saunders., 2012). Researcher prefers an interview because it encourages face to face interaction with the respondents so that issues can be clarified therefore gaining in-depth information on the subject.

3.4.3 Documentary review

This is data collection technique based on reading books, report and documents which have information related to the topic (Kothari, 2008). In this view researcher used the already worked data i.e. secondary data from JALI TRANSPORT LTD document; published and non- published materials used as a source of data to supplement primary data.

3.5 Validity and reliability tests

3.5.1 Reliability

According to Donald, (2016) research instruments are expected to yield the same results with repeated trials under similar conditions. Before the launch of the final experimental questionnaire, a pre-testing survey took place in order to identify if the whether the settled questionnaire were able to measure the relationship between the variables understudy.

Researcher used Cranach's alpha to test the reliability of instruments employed in the present research. According to Bailey, (2010) Cranach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. A coefficient of 0.70 is taken to be reliable (Cronbach, 1995). Table 3.1 show the results obtained after computing the test retests reliability statistics.

Table 3.1 Test Retest Reliability

Crombach's Alpha	Standardized Items	N of Items
0.873	0.878	15

Looking at the test retest results presented above it clear that Cronbach's Alpha is 0.873 and according Alpha when is 0.8 >@ ≥0.7 the test to test reliability is acceptable. Therefore, this means that used questionable was reliable.

3.5.2 Validity

Mugenda (1999) defines validity of results as a degree to which results obtained from the analysis actually represent the variables of study. Thus, validity refers to whether the findings accurately reflect the situation and are supported by evidence. Validity is established by correlating the scores with a similar instrument. The researcher used pre-test technique to confirm the validity of the instrument by developing a pilot set of questions and asking them to a number of people, to verify whether the questions are clearly worded and easily understood and whether the respondents know the answers or not. The results of pilot questionnaire may identify a number of deficiencies such as wording and some missing elements crucial to provide an answer to the specific aspect of the research. Researcher revised and correct questionnaire accordingly before launching the questionnaire to JALI TRANSPORT LTD.

3.6 Methods of data processing and analysis

This section focus on methods that researcher used to process and analyze collected data.

3.6.1 Methods of data processing

Researcher analyzed data after editing, coding and tabulation. This analysis based on percentages that were obtained to show the relationship between the study variables. Researcher summarized the information according to the objectives of the study. For this research to be successful; the researcher used the analytical method. This helped to separate different parts that make a whole data in order to realize a crucial study of each one aside.

According to Rwigamba (2011), this method allows to analyze systematically all information as well as data gathered. This was used to analyze data collected and other information pertaining to the research; it enabled the researcher to analyze information and data that he collects case by case. It helped to analyze statistics and other data that give the idea.

3.6.2 Methods of data analysis

The study adopted both qualitative and quantitative methods. In explaining qualitative findings, researcher employed content analysis. Researcher measured the impact of covid-19 on public transport in terms of percentage according to response from selected sample size. Researcher also used the necessary tables and narrative models to represent the results from the data analysis. Furthermore, each question that researcher used in the questionnaire or interview was structured in such a way that it provides the underlying information, thereby answering a particular research item so as to meet a defined objective. Researcher processed collected quantitative data by using the statistical package for social sciences (SPSS) as it has extensive

analytical capacity. The researcher also used Analysis of Variance (ANOVA); model Summary and Pearson Correlation to measure the impacts of Covid-19 on JALI TRANSPORT LTD's business activities.

3.7. Limitations

The following limitations may encounter during the process of data collection:

(i) Availability of respondents may be a constraint because some time some of them were busy and refuse to respond.

(ii) The process of distributing questionnaire was very tiresome and expensive to the researcher.

(iii) Biased respondents would be another limitation to the researcher. This is because some respondents in the interview could give wrong information or even refuse to give any information.

3.8 Ethical considerations

Researcher conducted a research in JALI TRANSPORT LTD ethically where firstly apply for authorization of conducting research in this company, secondly respect the confidentiality in research respondents, and not harm the participants in the research concern. And researcher ensures the readers and all party who was interested on this research that the content of this research with case of JALI TRANSPORT LTD has quality and integrity. And also the participants of this research participated voluntary. On the other side researcher gave each respondent a letter explaining the nature of the research project, the letter also assured respondents of the confidentiality of the information as well as guaranteeing their anonymity.

CHAPTER 4. DATA ANALYSIS, INTERPRETATIONS AND DISCUSSION OF RESULTS

This chapter involves the data gathered from the field, analysis and its interpretation. The data gathered was mainly in line with the research objectives and the overall purpose of research which was to investigate the impact of Covid-19 on Public transport in Rwanda. Under such tables, a short conclusion related to the impacts Covid-19 on sustainability of JALI TRANSPORT LTD; the impacts of Covid-19 on JALI TRANSPORT LTD profitability and possible strategies and way-forward to manage the impacts of Covid-19 on ALI TRANSPORT LTD were formulated.

4.1. Respondents profile

The tables bellow presents the profile of respondents in terms of age, education level and gender. Therefore, this is to ensure that respondents have a wider knowledge on the information that we were looking for.

Table 4. 1 Gender of respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	31	75.6	75.6	75.6
	Female	10	24.4	24.4	100
	Total	41	100.0	100.0	

Source: Primary data, 2023

Looking sat the results presented in the table 4.1 it is clear that the majority of respondents representing by 75.6% are male followed by female with 24.4% of the total respondents. Therefore, these shows that both male and female were represented in this study. However, male was many because of the nature of activities done in transport sector.

Table4. 2. Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary	7	17.1	17.1	17.1
	Secondary	7	17.1	17.1	34.1
	A1	5	12.2	12.2	46.3
	Bachelors	14	34.1	34.1	80.5
	Masters	8	19.5	19.5	100
	Total	41	100.0	100.0	

Source: Primary data, 2023

The results presented in the table above shows that out of 41 respondents, 7 respondents who makes up 17.1% have primary level of education, 7 respondents who makes up 17.1% have Secondary level of education, 6 respondents equivalent to 14.6% have A1, 14 respondents with 34.1% have Bachelor's degree and the remaining 5 respondents with 12.2% have Master's degree. The respondents with Bachelor's degree (34.1%) are many compared to other respondents mainly because it is requirement from the company for many jobs there. In addition, since the number of respondents with masters and bachelor's degree takes 53.7%

outweighs respondents with lower level of education indicates that the responses provided will be realistic since respondents have enough knowledge of what they answered.

Table4. 3. Job experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than one year	11	26.8	26.8	26.8
	Between 1-2 years	3	7.3	7.3	34.1
	Above 2 years	27	65.9	65.9	100.0
	Total	41	100.0	100.0	

Source: Primary data, 2023

From the above table, it is seen that 8 respondents making up 26.8% have less than one year of experience from the company, 2 respondents with 7.3% have between 1-2 years of experience and the remaining 19 respondents making 65.5% have more than two years of experience. This has an implication that since a big number of respondents (65.9%) have more than two years of experience in the company, they have enough knowledge of what has been taking place before covid-19 and what happened during covid-19 and hence can compare the situation before and after. Hence the information provided is highly reliable.

4.2. The impacts Covid-19 on the transport activities of JALI TRANSPORT LTD

One of the objectives of this study is to find out the impacts Covid-19 on Business plan of Jali Transport Ltd. Therefore, under this section researcher assessed it through various indicators and results are presented in the tables below.

Table4. 4. Perception of employees on Covid-19 negatively affected their job security

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	3	7.3	7.3	7.3
	Disagree	8	19.5	19.5	26.8
	Agree	13	31.7	31.7	58.5
	Strongly agree	17	41.5	41.5	100
	Total	41	100.0	100.0	

Source: Primary data, 2023

Looking at the table above it is clear that a large number of respondents representing 41.5% strongly agreed that Covid-19 negatively affected their job security and 31.7% of the total respondents agreed with the statement. Only 26.8% of the total respondents answered negatively on this. In the interview with head of HR departments, he comply with what employees argued where he said that "none trusted that his job is safe because the company give some employees the letters of contract suspension and others received the letter that asked them to accept the reduction of their salaries within unknown period because of Covid-19 measures and for sure, during the period none knows when this pandemic will end. Therefore, through this employees lost the hope of their employment security.

4.2.1. Respondents view on whether Jali Transport Ltd was not able to exercise employees capacity building because of covid-19

In the interview with the team of HR department they pointed that:

"The company had a plan of providing training to employees in all departments within the period of 2020-2021 with the main purpose of enriching their capacity of performing well their assigned tasks. But because of Covid-19 pandemic none of these scheduled training taken place. And this of course has negative impact on their overall performance".

Normally, capacity building is whatever is needed to bring a business to the next level of operational, programmatic, financial, or company's maturity, so it may more effectively and efficiently advance its mission into the future. In further discussion with some respondents what researcher realized is that the company use to build capacity of its employees at different level due to training however in this period of covid-19 the program was not operated as it used because of some reason including lack of funds due to this pandemic as well as Measures against this pandemic. Therefore, this affected sustainability of Jali Transport since capacity building would have brought an added advantage on employees' performance.

Table4. 5 Comparison of current fleet and planed fleet

	Current fleet	**S/N**	**Planed fleet for the period of 2020/2021**
1	ROUTE 302 : KIMIRONKO-KIE-CHEZ LANDO-CBD	1	DOWN-TOWN TO GASANZE
2	ROUTE 304 : DOWNTOWN-KIMIHURURA-FAYSAL-KACYIRU	2	KIMIRONKO – NDERA
3	ROUTE 305 : KIMIRONKO-CHEZ LANDO-NYABUGOGO	3	GASANZE KIMIRONKO
4	ROUTE 306 : KIMIRONKO-ZINDIRO - MASIZI-BIREMBO	4	KIMIRONKO BUMBOGO
5	ROUTE 308 : ZINDIRO-CHEZ LANDO-CBD	5	NYABUGOGO –JALI
6	ROUTE 314 : KIMIRONKO-KIBAGABAGA-UTEXRWA-NYABUGOGO		
7	ROUTE 316 : KIMIRONKO-ZINDIRO-AZAM		

	ROUND_ABOUT		
8	ROUTE 322 : KIMIRONKO-MULINDI-MASAKA		
9	ROUTE 323 : ZINDIRO-NYABUGOGO		
10	ROUTE 325 : KIMIRONKO-MULINDI-KABUGA		
11	ROUTE 301 : DOWNTOWN-RDB-KINYINYA		
12	ROUTE 303 : DOWNTOWN-GAKINJIRO-KAGUGU-BATSINDA		
13	ROUTE 309 : KIMIRONKO -KIBAGABAGA-KINYINYA		
14	ROUTE 310 : NYABUGOGO-GAKINJIRO-KAGUGU-BATSINDA		
15	ROUTE 311 : NYABUGOGO -ULK-FAWE-KAGUGU		
16	ROUTE 313 : DOWNTOWN-ULK-FAWE-KAGUGU		
17	ROUTE 315 : NYABUGOGO -UTEXRWA-KINYINYA		
18	ROUTE 317 : DOWNTOWN-UTEXRWA-KINYINYA		
19	ROUTE 318 : KIMIRONKO-KIBAGABAGA-BATSINDA		
20	ROUTE 321 : GASANZE-BATSINDA-NYABUGOGO		
21	ROUTE 401 : NYAMIRAMBO-CHUK-CBD		
22	ROUTE 402 : DOWNTOWN-NYABUGOGO-NYAMIRAMBO		
23	ROUTE 403 : DOWNTOWN-NYABUGOGO-NYACYONGA		
24	ROUTE 404 : NYABUGOGO-RUYENZI-BISHENYI		
25	ROUTE 405 : NYABUGOGO-KANYINYA(TABA)		
26	ROUTE 406 : NYAMIRAMBO(ERP)-MIDUHA-MAGERAGERE		
27	ROUTE 407 : NYABUGOGO-KARURUMA-NYACYONGA		
28	ROUTE 411 : NYABUGOGO-NZOVE-		

	RUTONDE		
29	ROUTE 414 : NYABUGOGO-RURIBA-KARAMA COMPLEX SCHOOL		
30	ROUTE 416 : NYABUGOGO-GIHARA(Market)		
31	ROUTE 417 : KARAMA(Norvege)-RYANYUMA		
32	ROUTE 418 : NYABUGOGO-KARURUMA-BWERAMVURA		

The table above shows that currently Jali transport LTD have 32 fleet in Kigali-city however it planned to have other 5 new fleet for the period of 2020-2021 according it annually plan. In further discussion with the staffs who is in charged of planning in this companies they mentioned that:

> *"Plan execution goes hand in hand with the existing revenue. And one of the main source of revenue that the company expected when planned to introduce 5 new fleet was company's turnover which would be influenced by the increased number of passengers, and during the Covid-19 pandemic because of the established prevention measures, even the existing customers were reduced therefore, this is cause a serious fail of this plan".*

Therefore, here the researcher concludes that covid-19 affected Jali Transport Ltd and it did not expand its fleet. Therefore, this allow researcher to confirm that covid-19 negatively affected the activities of Jali Transport Ltd's business.

4.3. The financial performance of JALI TRANSPORT LTD

The second objective of the study was to assess the impacts Covid-19 on the transport activities of JALI TRANSPORT LTD. Therefore, under this section researcher assessed it through a comparative study on some performance study on the using the financial data of before covid-19 pandemic and during Covid-19 pandemic. Therefore, results are presented on the table below.

Table4. 6. Trend in sales

years	Sales	Trend	Trend rate
2017	10,717,412,552		
2018	15,411,233,369	4,693,820,817	43.80
2019	6,088,661,619	-9,322,571,750	-60.49
2020	8,260,445,834	2,171,784,215	35.67
2021	6,195,256,995	-2,065,188,839	-33.92

Source: Annual Report (2017-2021)

The results presented in the table above shows that the total revenue (sales) of Jali transport Ltd increased by 43.8% in 2-018 exactly one year before Covid-19 which means that the company's sales were in good position before Covid-19 pandemic. However, things went wrong during Covid-19 were sales decreased at high level in 2019 (60.49%) increased by 35.67% in 2020 and decreased again by 33.92% in 2021. Back to the main purpose of assessing the effect of Covid-19 on public transport in Rwanda with a reference to Jali Transport ltd, results shows that it recognized a considerable positive trend before covid-19, however the situation start to negatively change during covid-19 period exactly from 2019 and in 2021 things were total wrong

where the revenue shifted down. Therefore, due to this researcher confirm Covid-19 has negative effects on the profitability of Jali Transport ltd.

Table4. 7. Trend in gross profit

years	Gross profit	Trend	Trend rate
2017	5,863,921,581		
2018	6,652,663,679	788,742,098	13.45
2019	1,841,324,950	-4,811,338,729	-72.32
2020	2,428,735,071	587,410,121	31.90
2021	1,405,875,790	-1,022,859,281	-55.55

Source: Annual Report (2017-2021)

Looking at the table above it is clear that Jali Transport ltd recognized a positive trend of gross profit before Covid-19 were it increased by 13.45% in 2018. However, things were negatively changed from 2019 because of Covid-19 pandemic where it decreased by 72.32% in 2018, increase by 31.90% in 2020 and decreased again by 55.55% in 2021. Someone may say that in 2020 things went well but it is wrong because gross profit was at lowest level compared to before Covid-19 pandemic. It was only a small step because it come very far in negative. Therefore, this means that Covid-19 affected the profitability of this company due to some measures against this pandemic such as social distancing which obliged all transport companies to not exceed 50% of the capacity of the bus as well as lock downs. Therefore, this allow

researcher to confirm that Covid-19 negatively affected the profitability of public transport companies in Rwanda at the head Jali Transport ltd.

Table4. 8. Trend in operating profit

years	Operating profit	Trend	Trend rate
2017	526,313,338		
2018	1,015,500,468	489,187,130	92.95
2019	58,325,003	-957,175,465	-94.26
2020	199,710,064	141,385,061	242.41
2021	-50,881,725	-250,591,789	-429.65

Source: Annual Report (2017-2021)

The results presented in the table above also shows that Jali Transport ltd recorded 92.95% of the increase in operating income before Covid-19 pandemic period. However, the situation changed during covid-19 where operating profit shifted down and decreased by 94.26% in 2019, and by 429.65% in 2021. Therefore, these prove that the company struggled a lot in terms of operating income during covid-19 pandemic.

Table4. 9. Trend in asset

years		**Trend**	**Trend rate**
2017	14,437,562,574		
2018	16,101,221,605	1,663,659,031	11.52
2019	6,381,068,363	-9,720,153,242	-60.37
2020	214,000,000	-6,167,068,363	-96.65
2021	214,000,000	0	0.00

Source: Annual Report (2017-2021)

The table above also demonstrate that Jali Transport ltd recorded a positive trend in 2018 where it increased by 11.52%. However, it decreased at a considerable level during the covid-19 pandemic where it decreased by 60.37% and by 96.65% during the period of covid-19 pandemic respectively from 2019-2020. However, it remained at the same level in 2021. Therefore, this prove that the company were not able to acquire any new asset in 2021 as results of Covid-19.

Table4. 10. Trend in equity

years		Trend	Trend rate
2017	5,423,843,346		
2018	5,062,675,443	-361,167,903	-6.66
2019	-2,092,290,266	-7,154,965,709	-141.33
2020	-2,181,065,793	-88,775,527	4.24
2021	-2,748,724,339	-567,658,546	27.13

Source: Annual Report (2017-2021)

Equity of this company also was assessed in both before covid-19 pandemic and during this pandemic. What researcher realized here is that even if the company under study recognized a negative trend even before covid-19 where it decreased by 6.66% in 2018. Things was aggravated in 2019 where it decreased by 141.33%. However, there is a hope of life recovery in this company since it records a trend of 4.24% in 2020 and 27.13% in 2021.

4.4. Ratios analysis

Analysis and interpretation of accounting ratios provide a skilled experienced analyst, a better understanding of the financial conditions and institutional profitability than what could have obtained only through a perusal of financial statements. Therefore, in this section researchers analyzed the profitability of Jali transport ltd through the following ratios and results are presented below.

4.4.1. Profitability ratios

Profitability ratios such as profit margin ratio; Return On Assets and Return On Equity were found to be the most important measures of business performance. Therefore, below are the comparison of profitability ratios of two periods. Before, and during covid-19 pandemic.

Table4. 11Profit margin ratio

Years	2017	2018	2019	2020	2021
Net profit	-242,217,098	-545,380,495	-477,091,990	-88,775,527	-664,313,039
Sales	10,717,412,552	15,411,233,369	6,088,661,619	8,260,445,834	6,195,256,995
Profit margin ratio	-2.26	-3.54	-7.84	-1.07	-10.72

Source: Annual Report (2017-2021)

Looking at the results presented in the table above it revealed that profit margin of Jali transport ltd 2017-2021 was -2.26%; -3.54%; -7.84%; -1.07% and -10.72%. This means that in the first two years or in the other words before Covid-19 the profit margin ratios of this company was negative however things were aggravated during covid-19. Let us remember that Covid-19 start in 2019 at worldwide level and from the time even Rwandan economics was affected. But in 2020 the situation was aggravated by this pandemic. It is due this the profit margin was shifted down in during this period. Therefore, these prove that Covid-19 lockdown effectively affected the business activities negatively in Rwanda particularly that of commercial building like Jali Transport.

Table4. 12. Return on Asset ratio

years	2017	2018	2019	2020	2021
Net profit	-242,217,098	-545,380,495	-477,091,990	-88,775,527	-664,313,039
Total Assets	14,437,562,574	16,101,221,605	6,381,068,363	214,000,000	214,000,000
Return on Asset ratio	-1.68	-3.39	-7.48	-41.48	-310.43

Source: Annual Report (2017-2021)

The results presented in the table above shows that the ratio of return on assets in Jali transport from 2017-2021 were -1.68%; -3.39%; -7.48%; -41.48% and -310.43% respectively. This shows that in the first two years the ratio was negative however but at low level compared to what happened during covid-19 from 2019 to 2021. Back to the relationship between these results and Covid-19 pandemic it is clear that 2019; 2020 and 2021 was not good for this company. Therefore, this prove that this pandemic negatively affects the profitability of the company understudy.

Table4. 13. Return on Equity ratio

years	2017	2018	2019	2020	2021
Net profit	-242,217,098	-545,380,495	-477,091,990	-88,775,527	-664,313,039
Total Equity	5,423,843,346	5,062,675,443	-2,092,290,266	-2,181,065,793	-2,748,724,339
Return on Asset ratio	-4.47	-10.77	22.80	4.07	24.17

Source: Annual Report (2017-2021)

The table above shows that the ratio of Return On Equity of Jali transport were -4.47%; -10.77%; 22.80%; 4.07% and 24.17% respectively from 2017-2021. This shows that in the first two years return on equity were negative, however from 2019-2021 the company recorded positive return on equity. But it shifted down in 2020 because of covid-19 lockdown. Therefore, this allows researcher to confirm that Covid-19 pandemic negatively affect the profitability of public transport in Rwanda particularly that of Jali Transport Ltd.

Table4. 14. Liquidity ratios

Ratios		2017	2018	2019	2020	2021
Current ratio	Current assets	429,644,210	714,524,010	71,050,000	1,305,945,111	1,521,107,564
	Current liabilities	305,414,905	1,110,614,471	2,624,775,977	5,582,629,747	5,504,978,938
		1.41	0.64	0.03	0.23	0.28
Cash ratio	Cash+ Cash equivalent	58,551,848	172,484,384	-266,749,436	-194,872,767	-158,859,806
	Current liabilities	305,414,905	1,110,614,471	2,624,775,977	5,582,629,747	5,504,978,938
		0.19	0.16	-0.10	-0.03	-0.03
Quick ratio	Current assets-inventory	429,644,210	714,524,010	54,152,800	1,122,022,121	1,521,107,564
	Current liabilities	305,414,905	1,110,614,471	2,624,775,977	5,582,629,747	5,504,978,938
		1.41	0.64	0.02	0.20	0.28

Source: Annual Report (2017-2021)

The table above demonstrate that current ratio in Jali transport ltd were 1.41; 0.64; 0.03; 0.23 and 0.28 respectively from 2017-2021. Normally, this shows that current ratio of the observed periods is generally very low because almost all them are less than the minimum required level of 1.0 to employ an aggressive strategy of working capital control. This means that the situation is worse because current assets are not able to cover current liabilities. The company might incur delay charges from its inability to meet its short-term obligations. On the other side cash ratio of this company were 0.19; 0.16; 0.10; 0.03 and 0.03 respectively from 2017-2021. And quick ratio was respectively 1.41; 0.64; 0.02; 0.20 and 0.28 from 2017-2021. Therefore, this shows that Covid-19 pandemic negatively affect financial position of Public transport companies in Rwanda since from the time they are not even able to pay it short-term debt quickly.

Table4. 15. Leverage ratio

	2017	2018	2019	2020	2021
Debt	305,414,905	1,110,614,471	2,624,775,977	8,433,421,009	8,035,921,858
Asset	14,437,562,574	16,101,221,605	6,381,068,363	214,000,000	214,000,000
	0.02	**0.07**	**0.41**	**39.41**	**37.55**
Debt	305,414,905	1,110,614,471	2,624,775,977	8,433,421,009	8,035,921,858
Equity	5,423,843,346	5,062,675,443	-2,092,290,266	-2,181,065,793	-2,748,724,339
	0.06	**0.22**	**-1.25**	**-3.87**	**-2.92**
Total asset	14,437,562,574	16,101,221,605	6,381,068,363	214,000,000	214,000,000
Total equity	5,423,843,346	5,062,675,443	-2,092,290,266	-2,181,065,793	-2,748,724,339
	2.66	**3.18**	**-3.05**	**-0.10**	**-0.08**

Source: Annual Report (2017-2021)

The table above demonstrate that Debt to Asset Ratio were 0.02; 0.07; 0.41; 39.41 and 37.55 respectively from 2017-2021.Therefore, for the examined periods the debt to asset ratio fluctuates but is always below the 50%. However as usually because of covid-19 in 2020 things shifted down compared to others. This means that a low percentage of Jali transport ltd.'s assets can be claimed by its creditors. And this translates into low operational risk as financing new projects will not get difficult.

Debts to equity ratio were0.06; 0.22; -1.25; -3.87 and – 2.92 respectively from 2017-2021. This indicates that during Covid-19 period more debt was used to fund this company than equity.

The total asset to total equity ratio above shows that the assets of the company were reduced at high level during the period of covid-19 pandemic particularly in the last period of this study. Therefore, this prove that Covid-19 disturbed this business at the level it was not able to effectively use the existing asset to generate the new one.

4.5. The impacts of Covid-19 on JALI TRANSPORT LTD performance

The last specific objective of the present study was to examine the impacts of Covid-19 on JALI TRANSPORT LTD performance. Therefore, under this section researcher assessed it through various indicators and results are presented in the tables below.

4.5. 1.Inability in the loans repayment in the scheduled installment because of covid-19

JALI TRANSPORT

Ref 211100JTL/JIL/2021
Date 16/07/2021

CHIEF EXECUTIVE OFFICER
Cogebanque
Kigali - Rwanda

Dear Sir,

Re: Request for deferment of July to Sept 2021 instalments for JALI Transport loans

Reference is made to the current global covid-19 pandemic and the prime ministerial orders of 29th June 2021 and 12th June 2021restricting movements between districts and complete isolation of kigali city and announcing the reduction in working hours across the country. We also refer to the prime ministerial orders of 14th July 2021announcing complete lockdown in kigali, Burera, Gicumbi, Kamonyi, Musanze, Nyagatare, Rubavu, Rwamagana and Rutsiro districts where residents will not be allowed to leave their homes for a period for 2 weeks.

We would like to inform you that our public transport business has been grossly affected to the extent that we have not been able to raise any significant cash flows to cover most of our financial obligations since the beginning of July 2021.

It is against this backdrop that we request your good institution to us to defer the scheduled loan payments of July to September 2021. We shall be able to resume these payments once the current restrictions have been lifted.

We thank you for your support

TWAHIRWA Innocent
MANAGING DIRECTOR
JALI TRANSPORT LTD

JALI TRANSPORT

TWAHIRWA LOUIS DODO
Chief Executive Officer
JALI Investment Ltd

Source: Jali transport Ltd archive

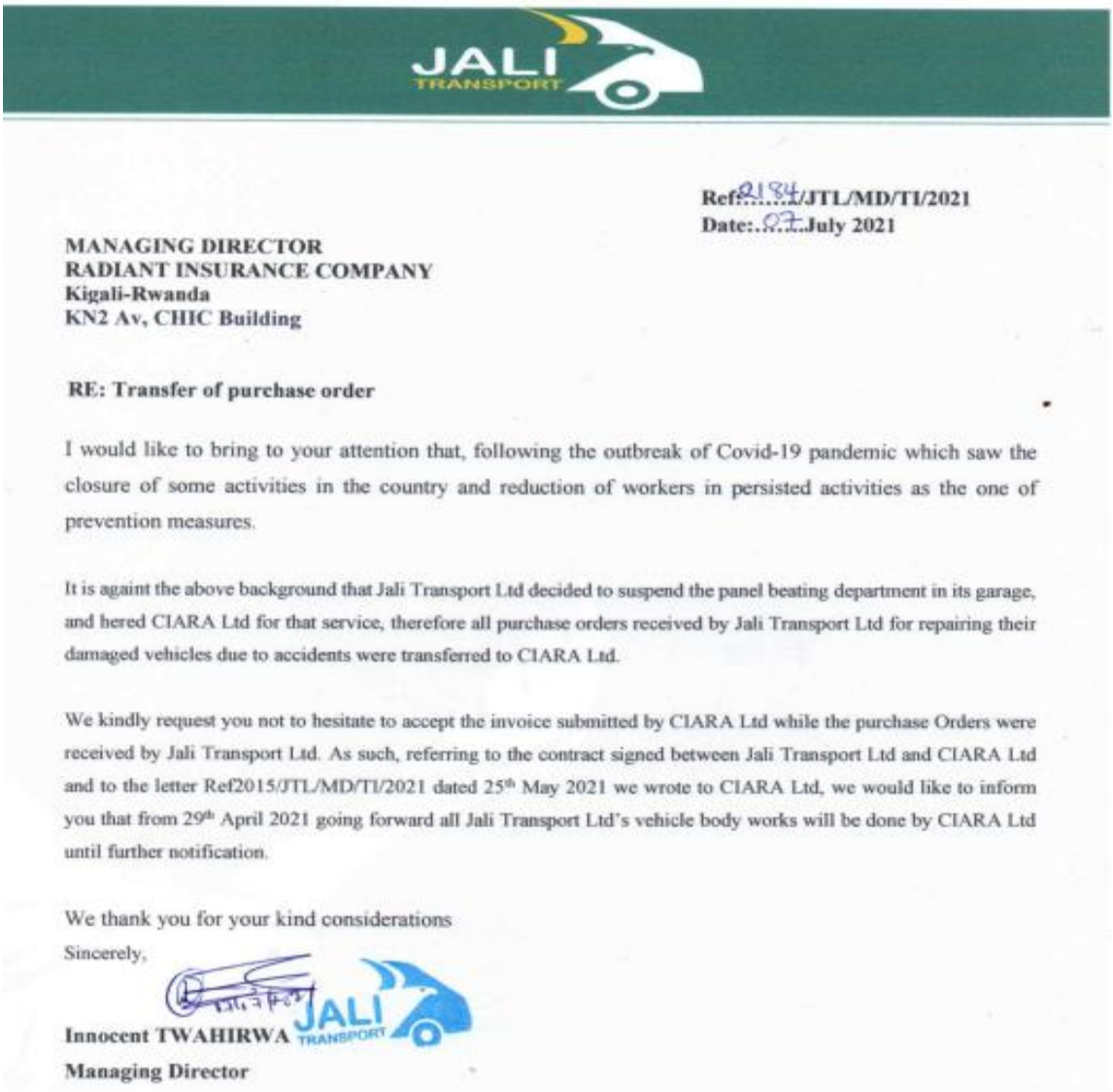
Referring to the letter Ref211100m/JIL/2021 it is clear that Jali Transport Ltd was not able to pay loans from banks in the scheduled installment because of covid-19 as it is detailed in the letter. In further discussion, researcher found out from the finance department that loans were not being repaid on the scheduled time because the company's income were highly decreased during covid-19 pandemic because of different measures taken against this pandemic such as lockdown and social distancing as well as reduction of working hours and reduction in unnecessary travel

which in turn disturbed the overall financial performance of the company's business at the level of not being able to pay back the loans. Therefore, let us remember that any kind of suspension in loans repayment bring an additional payment in term of interest and penalties, and of course these in turn negatively affect the company financially.

4.5.2. Inability in financing company's daily operation because of Covid-19 pandemic

As it is detailed in the letter Ref.No:002/JTL/KBS/ROY/ 2021 of 1st April/ 2021, attached in the part of appendices of this study it is clear that due to the effect of Covid-19 Public transport in Rwanda including Jali Transport LTD were not able to finance their daily activities without government's subsidy. It is from this the government of Rwanda availed to Jali Transport LTD a top-up of 1,116,149,863 Rwf for the period from 15th December to 31st March 2021. Normally, this kind of liquidity risks has a negative effect on financial performance particularly on the profitability of this company and this financial risks have been resulted by Covid-19 since the company have not been able to operate it business activities as it was before, due to some measure taken against this pandemic including lockdown, reduction of working hours and social distancing in the busy which in turn reduced the number of passengers while the consumption of the bus remain the same. Therefore, this clearly proves that covid-19 has negative impact on the overall financial performance of Jali Transport LTD.

4.5. 3.Transfer of some purchase order to the other company because of covid-19



JALI TRANSPORT

Ref:2184/JTL/MD/TI/2021
Date:07 July 2021

MANAGING DIRECTOR
RADIANT INSURANCE COMPANY
Kigali-Rwanda
KN2 Av, CHIC Building

RE: Transfer of purchase order

I would like to bring to your attention that, following the outbreak of Covid-19 pandemic which saw the closure of some activities in the country and reduction of workers in persisted activities as the one of prevention measures.

It is againt the above background that Jali Transport Ltd decided to suspend the panel beating department in its garage, and hered CIARA Ltd for that service, therefore all purchase orders received by Jali Transport Ltd for repairing their damaged vehicles due to accidents were transferred to CIARA Ltd.

We kindly request you not to hesitate to accept the invoice submitted by CIARA Ltd while the purchase Orders were received by Jali Transport Ltd. As such, referring to the contract signed between Jali Transport Ltd and CIARA Ltd and to the letter Ref2015/JTL/MD/TI/2021 dated 25th May 2021 we wrote to CIARA Ltd, we would like to inform you that from 29th April 2021 going forward all Jali Transport Ltd's vehicle body works will be done by CIARA Ltd until further notification.

We thank you for your kind considerations

Sincerely,

JALI TRANSPORT

Innocent TWAHIRWA
Managing Director

Source: Jali transport Ltd archive

Looking at the letter presented above it is clear that Jali transport Ltd was not able to perform some activities through to the reduction of workers as one of prevention measures against Covid-19 pandemic and this pushed the company to transfer some purchasing order to another company. Normally, the transferred orders were supposed to be performed by the company understudy and this would lead to a considerable turnover within this period. But their was no choice the company tried its best to do not delay the time it gave its clients and transfer the job

to another company. This means that the profit that Jali Transport LTD was supposed to gain from the job was transferred to someone else which in turn caused the poor financial performance. Therefore, this shows how Covid-19 pandemic negatively affected the performance of Jali Transport LTD.

4.5. 4. Suspension and nullifying of the contract through to the effects of Covid-19

JALI TRANSPORT

Ref : 2333 ...JTL/MD/TI/2021

Kuwa 04/10/2021

Bwana/Madamu.....

Driver

Tel : .....

Impamvu : Gusesa amasezerano y'umurimo

Nshingiye ku ibaruwa isubika amasezerano y'umurimo wandikiwe itariki 06/07/2021 kubera ingamba zafashwe mu rwego rwo kurwanya ikwirakwizwa ry'icyorezo cya Covid-19 zatangajwe mu itangazo ry'Ibiro bya Minisitiri w'Intebe ryo ku wa 29/06/2021 ritangaza ingamba nshya zafashwe zo gukumira ikwirakwizwa ry'icyorezo cya covid-19 zirimo kwirinda ingendo zitari ngombwa, gushishikarizwa gukorera mu rugo, kubuza ingendo mu turere dutandukanye tw'Igihugu, gufunga ibiro by'inzego za Leta n'iz'abikorera n'izindi ngamba zitandukanye zikubiye muri iryo tangazo,

Dushingiye ku ngingo ya 18 y'itegeko No : 66/2018 ryo ku wa 30/08/2018 rigenga umurimo mu Rwanda iteganya impamvu zishobora gutuma habaho isubika ry'amasezerano y'umurimo cyane cyane ku gika cyayo cya 6 ivuga ku mpamvu ndakumirwa (force majeure), dushingiye kandi ku mpamvu zagaragajwe haruguru zatumye akazi ka Jali Transport Ltd ukorera kagabanuka kubera ko ibiro by'inzego za Leta n'izabikorera bifunze ndetse n'abakozi bakaba barasabwe gukorera mu rugo bityo bikaba byaratumye ingendo z'abagenzi zigabanuka ndetse ibyo bikaba byaratumye umusaruro Jali Transport Ltd yinjizaga ugabanuka ku buryo bukabije bityo hakaba hafashwe umwanzuro wo kugabanya abakozi bakoraga ku modoka mu rwego rwo guhangana n'ikibazo cy'ubushobozi bucye bwatewe n'ihindagurika ry'imikorere ya Jali Transport Ltd biturutse ku ngamba Leta yashyizeho mu rwego rwo gukumira ikwirakwizwa ry'icyorezo cya Covid-19.

Kubera izo mpamvu zose twakugaragarije hejuru zatumye amasezerano wari ufitanye na Jali Transport Ltd asubikwa mu gihe kitazwi uhereye itariki ya 06/07/2021.

Nkwandikiye nkumenyesha ko tutabashije gusubukura amasezerano y'umurimo yawe kubera ko amezi atatu ashize ikigo kikiri gukorera mu gihombo kubera impinduka zigenda ziba mu mikorere isanzwe y'Ikigo kubera ingamba zo kwirinda ikwirakwizwa ry'icyorezo cya Covid-19 kikaba kitabasha gukomeza gukoresha abakozi bose uko bari basanzwe bityo amasezerano wari ufitanye na Jali Transport akaba aseshwe.

Ukaba usabwe kwegera umuyobozi ushinzwe imicungire y'abakozi kugirango umugezeho ibikoresho by'ikigo birimo umwenda w'akazi, ikarita y'akazi na driver vocational card ya RURA wakoreshaga ndetse nawe akubarire ibyo amategeko akugenera.

Ugire amahoro !

TWAHIRWA Innocent 7/10/2021

JALI TRANSPORT

Umuyobozi Mukuru

Source: Jali transport Ltd archive

The letter above shows that Jali transport Ltd's business activities were disturbed by Covid-19 at the level of suspending the employees contracts as Nullifying some of them because the targeted market was considerably reduced as results of taken measures against pandemic and this reduced the financial revenue of the company so that it could not be able to cover the payroll expenses. Normally suspension of the contract solved a half of the problem because some employees whom was in this situation found another job opportunities and join new employment while the Jali company ltd spent a lot by training them to feet the required skills to accomplish the assigned tasks. And currently they leaved the job. Therefore, this in turn currently push the company to spend more on the new recruitment and train. This shows that Covid-19 pandemic negatively affected the financial performance of Jali Transport LTD.

4.6. Correlation analysis

The main purpose of this study was to find out the to investigate the impact of Covid-19 on Public transport in Rwanda. Therefore, under this section researcher analyzed it using correlation analysis and the results are presented below.

Table4. 16. Correlation matrix

		Covid-19	**Profitability of JALI Transport LTD**
Spearman's Rho	Correlation coefficient	1	.643
	Sig. (2tailed	.	.000
	Coefficient of determination		0.481
	N	41	41

Source: Primary data, 2023

Looking at the result presented in the table 4.31 correlation matrix, it is clear that the variables understudy has significant and positive correlation. This was indicated by the correlation of coefficient (.643) which is positive and strong. The probability value (.000) is inferior of the significance level (0.05), this is evidence that the correlation is statistically significant. This denotes that any single measure against Covid-19 such as Social-Distancing and lockdown negatively affected the profitability of JALI Transport Ltd.

CHAPTER 5: SUMMARY CONCLUSION AND SUGGESTIONS

5.0. Introduction

This is the final chapter in this study which gives the summary of the findings, the conclusions and recommendations of the study based on the objective of the study. It comes after identifying the background, problem at hand and the objectives in chapter one, literature review was done in chapter two, chapter three set out the methodology that the study used to collect data and chapter four analyzed the data obtained from the study. The chapter finally presents the suggestions for further studies on the impact of Covid-19 pandemic on public transport in Rwanda with a case of Jali Transport Ltd.

5.1. Summary

The study was about the impact of Covid-19 pandemic on public Transport in Rwanda with a case of Jali Transport Ltd. Specifically this study assessed the impacts Covid-19 on the transport activities of JALI TRANSPORT LTD, analyzed the financial performance of JALI TRANSPORT LTD within the period of 2017-2021and examine the impacts of Covid-19 on JALI TRANSPORT LTD performance. In virtue to the main purpose of this study, researcher designed an appropriate research methodology and used the interview, questionnaire and documentation techniques to collect relevant data.

;

5.1.1 The impacts Covid-19 on the transport activities of JALI TRANSPORT LTD

Regarding to the impacts Covid-19 on the transport activities of JALI TRANSPORT LTD, results shows that, a large number of respondents representing 41.5% strongly agreed that Covid-19 negatively affected their job security and 31.7% of the total respondents agreed with the statement. Only 26.8% of the total respondents answered negatively on this. On the issues of whether Jali Transport Ltd was not able to exercise employees capacity building because of covid-19, the interviewee testified that the company had a plan of providing training to employees in all departments within the period of 2020-2021 with the main purpose of enriching their capacity of performing well their assigned tasks. But because of Covid-19 pandemic none of these scheduled training taken place. And this of course has negative impact on their overall performance. It was also observed that currently Jali transport LTD have 32 fleet in Kigali-city however it planned to have other 5 new fleet for the period of 2020-2021 according it annually plan. In further discussion with the staffs who is in charge of planning in this companies they mentioned that plan execution goes hand in hand with the existing revenue. And one of the main source of revenue that the company expected when planned to introduce 5 new fleet was company's turnover which would be influenced by the increased number of passengers, and during the Covid-19 pandemic because of the established prevention measures, even the existing customers were reduced therefore, this is cause a serious fail of this plan. Therefore, this shows that the transport activities of JALI TRANSPORT LTD were negatively affected by Covid-19.

5.1.2. The financial performance of JALI TRANSPORT LTD

Regarding to the financial performance of JALI TRANSPORT LTD, results shows that the performance of this company shifted down in the period of COVID-19 where the total revenue

(sales) of Jali transport Ltd increased by 43.8% in 2-018 exactly one year before Covid-19 which means that the company's sales were in good position before Covid-19 pandemic. However, things went wrong during Covid-19 were sales decreased at high level in 2019 (60.49%) increased by 35.67% in 2020 and decreased again by 33.92% in 2021. it is clear that Jali Transport ltd recognized a positive trend of gross profit before Covid-19 were it increased by 13.45% in 2018. However, things were negatively changed from 2019 because of Covid-19 pandemic where it decreased by 72.32% in 2018, increase by 31.90% in 2020 and decreased again by 55.55% in 2021. Profitability ratios also show that profit margin of Jali transport ltd 2017-2021 was -2.26%; -3.54%; -7.84%; -1.07% and -10.72%. Return on assets in Jali transport from 2017-2021 were -1.68%; -3.39%; -7.48%; -41.48% and -310.43% respectively. Return On Equity of Jali transport were -4.47%; -10.77%; 22.80%; 4.07% and 24.17% respectively from 2017-2021. Briefly this shows that the profitability of this company goes down within the period of Covid-19.

5.1.3. The impacts of Covid-19 on JALI TRANSPORT LTD performance

The results on this issues shows that referring to the letter Ref211100m/JIL/2021 it is clear that Jali Transport Ltd was not able to pay loans from banks in the scheduled installment because of covid-19 as it is detailed in the letter. In further discussion, researcher found out from the finance department that loans were not being repaid on the scheduled time because the company's income were highly decreased during covid-19 pandemic because of different measures taken against this pandemic such as lockdown and social distancing as well as reduction of working hours and reduction in unnecessary travel. Also, due to the effect of Covid-19 Public transport in Rwanda including Jali Transport LTD were not able to finance their daily activities without government's subsidy. It is from this the government of Rwanda availed to Jali Transport LTD a

top-up of 1,116,149,863 Rwf for the period from 15th December to 31st March 2021. On the other side, the results shows that that Jali transport Ltd's business activities were disturbed by Covid-19 at the level of suspending the employees contracts as Nullifying some of them because the targeted market was considerably reduced as results of taken measures against pandemic and this reduced the financial revenue of the company so that it could not be able to cover the payroll expenses.

5.3. Conclusion

From the findings of the study, it was concluded that covid-19 pandemic affected Rwandan public transport negatively particularly Jali transport Ltd where by reducing it profitability because of some measures like lockdown and social distancing were passengers were reduced at a considerable level. In turn to this the suspension of the employees' contract, reduction of salaries and deployment of some head staff to assist in the field operation while they had their own assigned tasks which increased unpaid working hours and all these affect employees' motivations which in turn disturb their performance. Suspension of the contract on the other side leave problems in the companies since some experienced employees who were even trained by the company find jobs in other competitor's companies. Also correlation matrix shows that covid-19 affected the business of this company at high level. Therefore, this allow researcher to confirm the H_1 stipulating that Covid-19 has an impacts on JALI TRANSPORT LTD's public transport activities.

5.2. Suggestions

Because of the gravity of the impact of covid-19 pandemic on the public transport sector in Rwanda particularly in Jali Transport Ltd, these companies are recommended to always save and plan for unexpected situations such as pandemics.

The Rwandan government is advised to always provide financial support so that businesses can recover in all unforeseen situations that harm businesses, because the failure of businesses affects the tax collections, since these businesses are the source of tax revenues.

It has also been claimed that the pandemic makes it extremely difficult to repay loans as usual. Therefore, banks are advised to be flexible in the terms of loan restructuring so that public transport companies and other business can continue to operate and repay the loans.

5.3 Suggestion for further study

Basing on the effects leaved by covid-19 pandemic to business sector in general, further study is recommended to the following topics:

1. Effect of covid-19 on commercial building's business in Kigali city
2. Effect of covid-19 on international business. A case of exportation in Rwanda.
3. The contribution of commercial bank in business recovery in the post-covid-19 period.

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Appendices

QUESTIONNAIRE

Dear Participant,

I am inviting you to participate in this research by completing the following survey. This research investigates the impact of covid-19 on Public Transport Ltd in Rwanda. The following questionnaire will require approximately 5-10 minutes to complete.

Thank you for taking the time to assist me with this research. Under no circumstances are you obliged to answer any of the questions; however, doing so will greatly assist me in completing my research and enhancing my understanding of this research focus. The data collected will remain confidential and used solely for academic purposes.

SECTION A: DEMOGRAPHIC PROFILE

Instructions: This section intends to capture your demographic profile. Please tick (✓)

Please tick the appropriate

1. **Age**
   - 20-30 [ ]
   - 31-40 [ ]
   - 41-50 [ ]
   - Above years [ ]
2. **Sex**
   - Male [ ]
   - Female [ ]

3. **Highest level of education (Tick one)**

- Primary [ ]
- Secondary (A2) [ ]
- Advanced diploma (A1) [ ]
- Bachelor [ ]
- Masters [ ]
- PhD [ ]
- Others (specify)…….

4. **How long have you been working in Jali Transport Ltd?**

- Less than 1 year [ ]
- Between 1-2 years [ ]
- Above 3 years [ ]

Section B: Related to the objectives of the study

1. In this section, we seek for your opinion regarding the effects of covid-19 on Public Transport companies. Please indicate the extent to which you agreed or disagreed with each statement using 5 points Likert scale. Please circle one number per line to indicate the extent to which you agreed or disagreed with the following statements.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree
5	4	3	2	1

Statement		**Rating**			
	Strongly agree (5)	**Agree (4)**	**Neutral (3)**	**Disagree (2)**	**Strongly Disagree (1)**
Because of Covid-19 till now passengers stay a long on bus stop while it was plan to handle this problem					
Passengers are facing problems because due to few supervisors which was planned to be solved before covid-19					
Vehicles spend many days in garage grounded because of no importation of spare parts needed due to covid-19.					
Garage mechanic were not trained to improve their capacity because of covid-19 (lack of funds)					
Some areas which were planned to be given Public Transport between 2020-2022 were not achieved because of covid-19					
Salaries of Jali Transport Ltd employees were not increased because of covid-19					
Loans from banks were not paid on planned time due to covid-19					
Jali Transport Ltd did not buy new buses because of financial constraints imposed by Covid-19					
If it was not because of Covid-19 that hindered planned meetings, Drivers would have stopped illegal collection of Transport fares					
Most vehicles of Jali Transport Ltd do not have valid technical inspection as a result of covid-19					

2. To what extent do you agree with the following statements regarding the strategies way forward to manage effects of Covid-19 on Public Transport in Jali Transport Ltd? Using a scale of 5– 1.

   Tick the appropriate answer from the alternatives provided for each of the questions.

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Statement		Rating			
	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
Jali Transport Ltd requested for loan restructuring from Banks due to failure to pay as before covid-19					
Salary of employees were reduced as a result of covid-19					
Head of staff were deployed to assist in field operations in order to assist in service delivery and revenue protection					
some employees' contracts were suspended to reduce payroll expenses					
Some drivers were terminated and deployment plan changed as a way of reducing payroll expenses					
Without government subsidy, Public Transport would have stopped completely					
Some contracts of suppliers were revised to reduce costs being incurred by Jali Transport Ltd					

Some purchase orders mainly international purchase orders were cancelled as a result of lack of enough money to pay for them					

END OF SURVEY

THANK YOU FOR YOUR PARTICIPATION!