

Exploring the disruption of Covid 19 on stakeholders utilising administrative processes at a Higher Education Institution

S Turkstra



orcid.org/0000-0002-2554-3605

Mini-dissertation accepted in partial fulfilment of the requirements for the degree [Master of Business Administration](#) at the North-West University

Supervisor: Dr JA Jordaan

Graduation: June 2023

Student number: 21630399

DECLARATION

I, Sonia Turkstra, hereby declare that this mini-dissertation entitled: Exploring the disruption of Covid 19 on stakeholders utilising administrative processes at a Higher Education Institution, is my work and declare that, to the best extent possible, the work contained herein is my own.

The mini-dissertation is submitted in partial fulfilment with the requirements set for the degree Master of Business Administration (MBA) at the North West University, Business School, Potchefstroom Campus and have not been submitted for any degree or to any other university.

Signed:

Date: 25 November 2022

Sonia Turstra

ACKNOWLEDGEMENTS

I thank our dear God and Heavenly Father, for granting me the opportunity and grace to complete this study.

A special word of gratitude to:

- My husband Johan and children for your unconditional love, support and prayers that kept me going. I love you all dearly.
- My family, friends and colleagues for the support and motivation.
- Dr Johan Jordaan, for his kind heart and guidance as my supervisor.
- Late Prof Stephen de La Harpe for his care and encouragement up until the last moment we saw each other.

ABSTRACT

The Covid-19 pandemic led to a dramatic loss of human life globally and presented an unprecedented challenge to the public health sector. The economic and social disruption caused by the pandemic was astronomical.

The purpose of this research was to explore the disruption of Covid-19 on stakeholders that utilises administrative processes at a Higher Education Institution. The study identified the factors that caused disruption and the effect thereof on the stakeholders. A qualitative research technique was used and the gathering of data was executed using semi-structured interviews. The interviews were conducted with ten participants involved at a higher education institution in the North-West Province.

A thematic analysis process was used for the data analysis technique. There were five themes identified which were interrelated. Causal relationships in the findings were identified and indicated that communication and training were found to be the main causes of the disruption.

Keywords: Disruption, Covid-19, stakeholders, administrative processes, Higher Education Institution

LIST OF ABBREVIATIONS

4IR:	Fourth Industrial Revolution
ATLAS.ti22:	Archive for Technology, Lifeworld, and Everyday Language.text interpretation
CAS:	Central Application Services
Covid-19:	Coronavirus Disease of 2019
HEI:	Higher Education Institution
NRF:	National Research Foundation
NWU:	North-West University
ODL:	Open Distance Learning
POPI:	Protection of Personal Information Act
RDGC:	Research Data Gatekeeper Committee
SALA:	Student Academic Lifecycle Administration
SARS-CoV-2:	Severe acute respiratory syndrome coronavirus 2
TVET:	Technical Vocation Education and Training
WHO:	World Health Organisation

TABLE OF CONTENT

DECLARATION	I
ACKNOWLEDGEMENTS	II
ABSTRACT	III
LIST OF ABBREVIATIONS	IV
LIST OF FIGURES	IX
CHAPTER 1 NATURE AND SCOPE OF THE STUDY	1
1.1 Introduction	1
1.2 Problem Statement.....	2
1.3 Rationale and Significance of the Study	3
1.4 Primary Objectives	3
1.4.1 Secondary objectives	3
1.5 Literature Review.....	3
1.6 Population and Sampling	4
1.6.1 Population	4
1.6.2 Sampling	4
1.6.2.1 Sampling technique	4
1.7 Data Coding and Analysis	5
1.8 Ethical Considerations.....	6
1.9 Permission and Informed Consent	6
1.10 Division of Chapters.....	6

1.11	Expected Limitations of the Study	8
CHAPTER 2 LITERATURE STUDY		9
2.1	Introduction	9
2.2	Higher education institution	9
2.3	Administrative processes	10
2.4	Stakeholders	12
2.5	Covid-19	12
2.5.1	Covid-19 Second wave.....	14
2.5.2	Covid-19 Third wave.....	14
2.5.3	Covid-19 Fourth wave	14
2.6	Vaccines	15
2.7	Epidemic vs Pandemic.....	15
2.8	Lockdown.....	15
2.9	Disruption	18
2.9.1	4th Industrial Revolution	20
2.9.2	Change Management	21
2.9.3	E-Learning	21
2.10	Chapter conclusion	22
CHAPTER 3 RESEARCH METHODOLOGY		23
3.1	Introduction	23

3.2	Research design and methodology	23
3.2.1	Research philosophy	23
3.2.2	Research approach	24
3.2.3	Population	24
3.2.4	Sampling	24
3.2.5	Sampling technique	24
3.3	Chapter conclusion	25
CHAPTER 4 DATA ANALYSIS		26
4.1	Introduction	26
4.2	Data analysis	26
4.2.1	Step 1: Transcription of recorded interviews	27
4.2.2	Step 2: Coding.....	28
4.2.3	Step 3: Defining and naming themes.....	29
4.3	Data finding and discussion.....	34
4.4	Chapter conclusion	43
CHAPTER 5 FINDINGS AND RECOMMENDATIONS		44
5.1	Introduction	44
5.2	Summary of findings.....	44
5.3	Causality	44
5.3.1	Communication	44

5.3.2	Technology development	45
5.3.3	New technology training	45
5.4	Recommendations	47
5.4.1	Centralised student communication platform.....	47
5.4.2	Technology and training	48
5.4.3	Paperless environment.....	48
5.4.4	Technology development	48
5.4.5	Sufficient resources	48
5.5	Achievement of the objective of the study.....	49
5.6	Recommendations for future research.....	49
5.7	Limitations	49
5.8	Chapter conclusion	50
	REFERENCES	51
	ANNEXURES	59
	ANNEXURE 1	60
	ANNEXURE 2	61

LIST OF FIGURES

Figure 1-1:	Division of Chapters	7
Figure-2-1:	Example of NWU management structure	10
Figure 2-2:	SALA administration.....	11
Figure 2-3:	Coronavirus.....	13
Figure 4-1:	Code groups.....	29

LIST OF TABLES

Table 2-1:	Summary of lockdown measures in South Africa (March-June 2020).....	16
Table 4-1:	Six-phase analytical process.....	27

CHAPTER 1 NATURE AND SCOPE OF THE STUDY

1.1 Introduction

On 5 March 2020 South Africa's Minister of Health, Dr Zweli Mkhize, confirmed that the 38-year-old patient zero, carrying the SARS-CoV-2 virus which causes Covid-19, entered the country after a trip to Italy with his wife and a group of 10 people (Mkhize, 2020). Somewhat three weeks later, on 27 March, South Africa was subjected to strict lockdown regulations ranging from levels 5 to 1, with 5 being the most stringent. Level 5 was in effect a complete shutdown, except for essential services. Restrictions were altered as needed as infection rates fluctuated. The majority of South Africans were ordered to stay at home, including stakeholders of higher education institutions.

The strict lockdown regulations induced by the Covid-19 pandemic widely disrupted universities' operational structures, forcing institutions of higher education across the world to adapt to new operational structures (Coetzee *et al.*, 2021). According to (Adeoye *et al.*, 2020) "the ripple effect of this pandemic has been felt by both the educators and students in primary and secondary schools, colleges and universities as academic sessions were disrupted after the coronavirus was declared a public health emergency". More notably, this pandemic was the first in history to cause as many problems in education, particularly in secondary and tertiary institutions (Karalis, 2020).

Government-mandated lockdown regulations and further social distancing requirements in South Africa in attempts to decrease infection rates. This affected how individuals across industries and institutions earn income (Van Heerden & Roos, 2020). Institutions of higher education were not exempted (Yee, 2020). Where complex administration processes are implemented, universities faced disruptions, potentially barring business and/or academic outcomes. Effective administrative processes are necessary for students and staff to work more effectively (Zhang *et al.*, 2012).

In a study by (Kupriyanova *et al.*, 2018) 68 higher education institutions from 21 countries, reported on their efficiency practices. The authors stated that these "institutions emphasised the importance of efficiency-oriented measures in the area of student services and managerial and administrative processes".

Stakeholders of universities, and in line with the purpose of this study, are listed by (Mncube *et al.*, 2021) as university managers, academic staff, and students. (Coughlan & Lister, 2018) define administrative processes as “encompassing tasks necessary in applying, claiming, registering, paying, booking, or being assessed, to achieve a particular goal”. The authors also describe this definition as “broad”.

This study explores the disruption of Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution amidst the Covid-19 pandemic.

1.2 Problem Statement

As stated before, higher education institutions accommodate a vast number of stakeholders across their different faculties and functions, and administrative processes are crucial for operational efficacy. The South African national lockdown regulations have forced such institutions to convert most administrative processes and academic operations to online platforms as citizens were subjected to lockdown regulations (Mncube *et al.*, 2021).

The pre-pandemic status quo of interpersonal assistance in administrative processes came to a halt when universities were forced to limit physical interaction by closing campuses. Almost all universities and other educational institutions set in a demographic with stable internet infrastructure opted to shift operations online (Karalis, 2020).

The existence of disruption in education, whatever the extent thereof, is supported by academics. (Karalis, 2020) explains that due to the massification of education in recent years, the effect of the disruption caused by the pandemic was more intense. During previous pandemics, far less of the population with special reference to secondary and tertiary education had access to education.

This study explores the disruption caused due to the Covid-19 pandemic for stakeholders utilising administrative processes at a Higher Education Institution. This leads to the following main research question: What disruption was caused by Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution?

1.3 Rationale and Significance of the Study

The study attempts to guide higher education institutions to improve their service level in the post-Covid-19 era.

1.4 Primary Objectives

The primary objective of this study is to explore the disruption of Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution.

1.4.1 Secondary objectives

To achieve the primary objective, the following secondary objectives need to be addressed;

- to establish what administrative processes are currently utilised by stakeholders,
- to explore what the said disruption entails for stakeholders via a qualitative study,
- to make recommendations on what can be implemented to neutralise disruptions and address possible challenges in the processes.

1.5 Literature Review

The review of the literature focuses extensively on various aspects of the Covid-19 pandemic. Furthermore, the Covid-19 pandemic affected society in general followed by narrowing in on how the pandemic affected higher educational institutions. In turn, it conveys a nuance of how the pandemic is disrupting higher educational institutions, specifically regarding stakeholders' utilisation of administrative processes. By connecting the pandemic to the issue at hand, the literature review provides the reader with an understanding of how the administrative processes are influenced by the rapid change in processes after the pandemic started and lockdown regulations were implemented.

Additionally, the literature review defines administrative processes and emphasises the importance of clear and concise administrative processes to ensure efficacy. The necessary sources have been quoted to realise that this is indeed an actual and researchable issue.

The information is obtained by using reputable academic databases. Sources include:

- Academic journal articles
- Books
- Government websites
- Internet websites

1.6 Population and Sampling

1.6.1 Population

The population of the study involves the stakeholders utilising administrative processes at the North-West University. The profiles for such individuals are North-West University students, parents, administrative staff, and academic staff.

1.6.2 Sampling

The process of sampling refers to the selection of a portion of the population for use in a study and is a representative sample. A sample is used to learn about the population in which the research is done and should be valid for the results to be generalised (Maree, 2016). Purposive sampling is used and applies to the sampling of the population relevant to the research being conducted. According to (Maree, 2016), purposive sampling means the selection of participants, relevant to the research question and according to pre-selected criteria. The sampling is based on a non-probability sample and was not selected using the method of random selection. Therefore, purposive sampling is most successful in reviewing the data and analysis in conjunction with the collection of the data.

1.6.2.1 Sampling technique

A literature review was done to gather contextual information on the disruption caused by the Covid-19 pandemic on higher educational institutions. Furthermore, semi-structured interview schedules were used in the research. Participants were required to answer predetermined questions, allowing for probing and discussion in gathering information. The interviews were conducted to explore the disruption of the Covid-19 pandemic on the stakeholders.

As a first sampling process, the researcher made use of the Corporate Communication Platform to invite prospective participants of the university. The different stakeholders were also contacted via telecommunication and email, in her work environment, representing students, parents, administrative personnel, and academics to take part in the study. Secondary acquaintances were recruited by snowball sampling. There were no positional power relationships at play that prevented participants from participating.

Interviews took place keeping Covid-19 protocols in mind and were done on online platforms including Zoom, MS Teams, and WhatsApp video calls. In cases where the researcher met participants in person, the opportunity was utilised to do the face-to-face interviews, all necessary Covid-19 protocols were observed to ensure no harm came to either the participant or the researcher.

This process was continued until saturation and beyond were achieved in each of the four groups: students, parents, academics, and administrators. Before interviews were conducted, the terms of the informed consent such as anonymity, the right to withdraw, confidentiality, and the right not to answer specific questions, that there are no monetary or other rewards for participating, and that raw data will only be used for research, stored for a limited period and then destroyed was disclosed to participants, ending with the statement – “By continuing with the interview you permit the results of the interview to be used in the research”. Permission was obtained to record interviews for accurate transcription.

1.7 Data Coding and Analysis

All transcriptions, coding, and analyses were done by the researcher. *ATLAS.ti* was used for the data coding and analysis.

ATLAS.ti is a program used for coding and creating network diagrams and analysing transcripts in qualitative research (NYU Libraries, 2021). Thematic analysis was utilised where the codes are grouped into code groups and organised into themes from which conclusions were drawn and recommendations made.

1.8 Ethical Considerations

According to (Bryman *et al.*, 2014) ethical principles and the transgression thereof can be classified into four areas:

- whether there is harm to participants;
- whether there is a lack of informant consent;
- whether there is an invasion of privacy;
- whether deception is involved.

North-West University has a structured process of obtaining permission that must be adhered to before data can be collected to perform the research. The study was approved by the Research Ethics Committee of the Faculty of Economic and Management Sciences with reference number NWU-00991-21-A4. The Research Data Gatekeeper Committee (RDGC) was established to control research at the institution. An application was submitted for approval and permission to conduct the research after obtaining ethical clearance. The study was approved by the RDGC with reference number NWU-GK-22-011.

Confidentiality and anonymity were of high priority as stated in the permission and informed consent document. This method was selected to ensure that sampling does not contravene ethical principles or the POPI act.

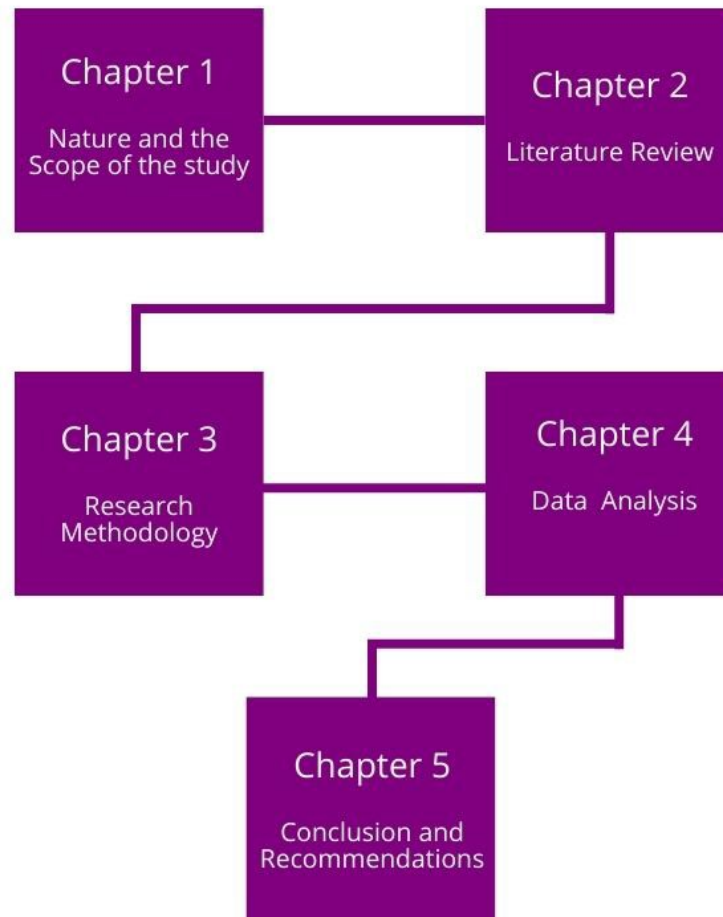
1.9 Permission and Informed Consent

The terms of the informed consent are included in the interview protocol as an introduction. No interviews were conducted unless informed consent had been given. The recording of the interviews is proof that participants have given consent for the interview to continue and for the data to be used. Their specific knowledge and subjective experiences were, however, needed as the individuals were actively involved in administrative processes.

1.10 Division of Chapters

The mini-dissertation consists of five chapters.

Figure 1-1: Division of Chapters



Source: Created by the researcher

Chapter 1 – This is an overview of the study and consists of an introduction, problem statement, research question, rationale and significance of the study, objectives, and scope of the study, research methodology, and limitations of the study.

Chapter 2 – This chapter reviews the existing literature on the current disruption of Covid-19 on higher education institutions' administrative processes.

Chapter 3 – The methodology is explained and the research model and chosen data collection and analysis are discussed.

Chapter 4 – Provides an overview of the data collected and the analysis is discussed.

Chapter 5 – The chapter provides the findings obtained from the study and discusses the results and conclusions concerning the research problem. Recommendations are made based on the research and findings.

1.11 Expected Limitations of the Study

The foremost limitation of this study is that the researcher is affiliated with the North-West University and that the sample may therefore be skewed and may not reflect the situation at other HEIs and TVET colleges. The findings may therefore not be representative of the greater disruption caused in the total higher education sector. The second limitation is geographical demarcation, as this study focuses on a higher education institution in the northern part of South Africa. Furthermore, as the pandemic developed in 2020, limited literature has been published regarding the impact it had on administrative processes, limiting the literature study's extent.

CHAPTER 2 LITERATURE STUDY

2.1 Introduction

The purpose of the literature study is to provide background information on the concepts that are necessary to successfully address the study's primary objective. As identified in chapter one, the study's primary objective is to establish what disruption was caused by Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution. The literature evaluation will include an in-depth review of the available literature on the disruption caused by Covid-19 at Higher Education Institutions.

2.2 Higher education institution

According to the academic publishing organisation (IGI Global, 2022), a higher education institution admits and trains students in various areas to award an academic degree or a professional certification. Universities, universities of technology, agricultural schools, and TVET colleges are examples of higher education institutions that specialise in a range of fields such as education, engineering, law, agriculture, medicine, the arts, and economics, amongst others (IGI Global, 2022). It is also known as a tertiary institution that offers study programs, which lead to undergraduate (bachelor or equivalent degree) or postgraduate (master's, doctoral) degrees.

(Al-Hosaini & Sofian, 2015) agree with this definition and state that higher education is the education leading to academic qualifications such as degrees and diplomas awarded by universities, colleges and other higher institutions of learning". These authors furthermore explain the scope of education entails undergraduate, college and postgraduate categories of learning. Courses offered at an institution of higher education aim to educate and train students for skilled professions (Al-Hosaini & Sofian, 2015).

Due to the expansion of academia over the last three decades, HEI facilitates employment and contributes to infrastructure, export activities, and state development.

The New York-based Ivy League institution, Cornell University (Cornell Law School, 2017), states a college, university, or other similar institution, including a technical or business school, is referred to as an "institution of higher learning". Furthermore, assuming that such an institution provides academic courses leading to a higher degree

and is authorised to do so by the relevant state education authority under relevant state law. If a school is accredited for degree programs by a recognised accrediting agency, it may be regarded as an institution of higher learning even though there is no state statute authorizing the awarding of a degree. The definition also includes any hospital that offers postsecondary educational programs, regardless of whether the institution awards postsecondary degrees.

An inclusive, effective, efficient, corporative, and participatory administrative structure is required to oversee university education (Akinyeye, 2019). It must also ensure that all stakeholders are acknowledged and valued when it comes to system administration (Akinyeye, 2019).

The organisational structures of institutions of higher education will differ. At North-West university the administration management structures are as follows:

Figure-2-1: Example of NWU management structure



Source: (North-West University, 2022)

2.3 Administrative processes

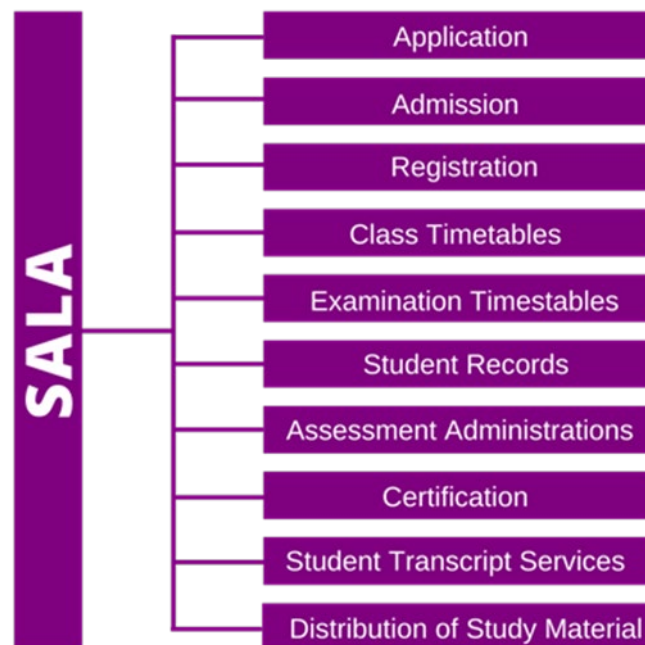
Administrative processes can be defined as office duties needed to keep an organisation functioning effectively and efficiently. Process management, data capturing, marketing, accounting, and human resources are examples of administrative procedures. In general, an administrative process is anything that involves controlling the data that underpins an institution (Velacation, 2022).

The North-West University's student administrative processes are centrally managed by Student Academic Lifecycle Administration (SALA). Its strategic framework strives for consistency, alignment, and good service delivery, which is to be achieved by providing clients with efficient academic administrative support through the optimisation of processes and systems with consistent and accountable application of policies and rules relevant to this environment within the context of the NWU strategic values (North-West University, 2022).

SALA has coordinated internal procedures with the needs of the external environment and the student academic lifecycle administration processes of the NWU across all delivery modes and Central Application Services (CAS) processes and compliance with current, new, and altered external regulatory regulations (North-West University, 2022).

SALA procedures are coordinated across all campuses of NWU, contact and distance learning, as well as undergraduate and postgraduate students as illustrated in the figure below.

Figure 2-2: SALA administration



Source: (North-West University, 2022)

2.4 Stakeholders

According to (Ehlers & Lazenby, 2014:16) stakeholders are people or groups who contribute to a specific institution's scope to achieve financial goals. This contribution, whether intentionally or unintentionally, proposes that stakeholders can potentially be beneficiaries or risk-bearers in the financial operations of such an institution.

Intentional stakeholders, such as investors, employees or customers contribute directly to the operational functions and goals of an organisation (Ehlers & Lazenby, 2014:16). At the 12th International Conference of Education, Research and Innovation held in November of 2019 in Spain, 13 possible definitions were identified as to whom can be considered stakeholders of universities (Seres *et al.*, 2019:9055-9056).

The vast amount includes accreditation commissions, alumni, communities, competitors, current students, donors and grant organisations, employers, faculties and employees, government authorities, high schools, local government, management, marketing, and public relations departments, media, parents, and prospective (Seres *et al.*, 2019).

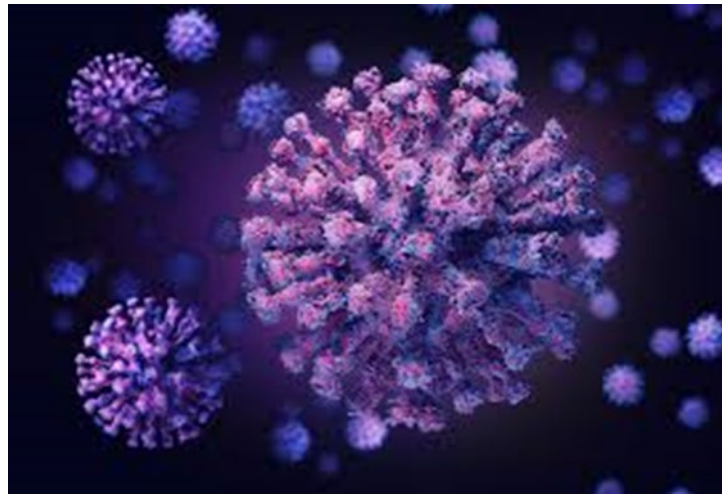
Specifically, the NWU defines its stakeholders as individuals or groups who are affected by the university's activities and services, and whose actions can in turn influence the NWU's ability to implement strategies to achieve certain goals. Furthermore, it identifies its primary stakeholders as students, alumni, the Council, staff, the Department of Higher Education and Training, peers, collaboration partners, and business communities (North-West University, 2022).

For this study, the following primary stakeholders were identified university managers, academic staff, and students (Mncube *et al.*, 2021). This was done with feasibility in mind to ultimately answer the research question: What disruption was caused by Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution? This can only be established by qualitative interviews with stakeholders who are directly affected by administrative processes.

2.5 Covid-19

The global pandemic was caused by the Coronavirus disease, which is an infectious disease caused by the SARS-CoV-2 virus (World Health Organization, 2021).

Figure 2-3: Coronavirus



Source: (Rees, 2020)

The majority of virus-infected individuals will experience mild to severe respiratory disease and will recover without the need for special care. However, some people will get serious illnesses and need to see a doctor. Serious sickness is more likely to strike older persons and those with underlying medical illnesses including cancer, diabetes, cardiovascular disease, or chronic respiratory diseases. COVID-19 can cause anyone to become very ill or pass away at any age (World Health Organization, 2021).

Knowing about the illness and the virus's propagation is the best strategy to stop or slow transmission. By keeping a distance of at least one meter between people, wearing a mask that fits properly, and often washing your hands or using an alcohol-based rub, you can prevent infection in both yourself and other people. It is crucial to be vaccinated and abide by any local advice (World Health Organization, 2021).

When an infected person coughs, sneezes speaks, sings, or breathes the virus can spread from their mouth or nose in liquid particles. These particles are diverse and range from larger respiratory droplets to tiny aerosols. It's crucial to use proper precautionary behaviour, such as coughing into a flexed elbow and isolating yourself until recovery (World Health Organization, 2021).

The virus that causes COVID-19, SARS-CoV-2, has been spread in various settings outside healthcare facilities. By preserving accessible and secure workplaces, policies

designed to protect employees help stop the spread of the virus inside communities and safeguard national economies.

A national state of disaster was announced and published in the *Government Gazette* 43096 on 15 March 2020 (Department of Employment and Labour, 2020)

Regulations were implemented by the Department of Employment and Labour to prevent the escalation of Covid-19 infections in the workplace. A document on Occupational Health and Safety Measures in Certain Workplaces were issued in the *Government Gazette* on 29 April 2020 (Department of Employment and Labour, 2020). The document pertained to guidelines and remained in force for as long as the state of disaster was declared.

The national state of disaster officially ended Monday, 4 April 2022.

2.5.1 Covid-19 Second wave

The COVID-19 pandemic in South Africa began in early March 2020, and instances peaked from 7 June 2020 until 22 August 2020 (76 days)(Jassat *et al.*, 2022), averaging over 13,000 cases daily. The number of cases reported daily fell to a 7% positivity rate, which was fewer than 1,000 cases per day. A new wave which starts after the "end of the first wave" and lasts one or more days is referred to as a "second wave." Furthermore, it follows after the previous peak when the reported cases return to 30% of the previous peak (Blumberg & Frean, 2020). The second wave was from 15 November 2020 to 6 February 2021 (83 days) and peaked in January 2021 as a new variant was identified namely: beta variant SARS-CoV-2 501Y.V2 (Jassat *et al.*, 2022).

2.5.2 Covid-19 Third wave

The third wave occurred between 9 May 2021 and 18 September 2021 (132 days). The delta variant (B.1.617.2) was identified during this period (Jassat *et al.*, 2022).

2.5.3 Covid-19 Fourth wave

The fourth wave was identified as the omicron variant and lasted from 21 November 2021 until 22 January 2022 (62 days) (Jassat *et al.*, 2022).

2.6 Vaccines

Vaccines can be administered as a substance that trains the body's immune system to fight diseases. It is designed to prevent disease and not treat a disease (Oxford Vaccine Group, 2019).

Due to the convergence of three factors: the virus was highly contagious, a substantial fatality rate, and the lack of any vaccines, the Covid-19 pandemic was unexpected as a public health phenomenon. The aim of vaccinating as much as possible of the population would help create herd immunity and therefore a defence against the disease (South African Government, 2021).

2.7 Epidemic vs Pandemic

The definition of an epidemic is a disease affecting a huge amount of people within a region, population or community. Furthermore, a pandemic can be defined as an epidemic affecting people and is spread over multiple countries and continents (Intermountain Healthcare, 2020).

2.8 Lockdown

A nationwide lockdown was announced by President Cyril Ramaphosa for 21 days from midnight Thursday, 26 March 2020 for 21 days as the confirmed Covid-19 cases escalated from 128 to 402 (Heiberg & Alexander, 2020). Ramaphosa stated "While this measure will have a considerable impact on people's livelihoods, on the life of our society and our economy, the human cost of delaying this action would be far, far greater (Heiberg & Alexander, 2020).

According to (Haider *et al.*, 2020) lockdown can be defined as measures indiscriminately applied to a general population, aimed at reducing the transmission of Covid-19 and that is mandatory and involves restrictions on social and economic life patterns.

The behaviour of citizens was instantly changed by implementing lockdown or "stay at home" as well as social distancing strategies (Krishnamurthy, 2020).

Research has shown that lockdown, in essence, caused more harm than good. Lockdown resulted in psychological and emotional distress, loss of household income or loss of employment and deprived children and students of studying (Haider *et al.*, 2020).

The impact of the lockdown on society as a whole, such as a downturn in the economy and recession, disruption of supply chains, escalation of social unrest, and the prospect for long-term degradation of civil freedoms and human rights, intensified the effects of destruction.

Table 2-1: Summary of lockdown measures in South Africa (March-June 2020)

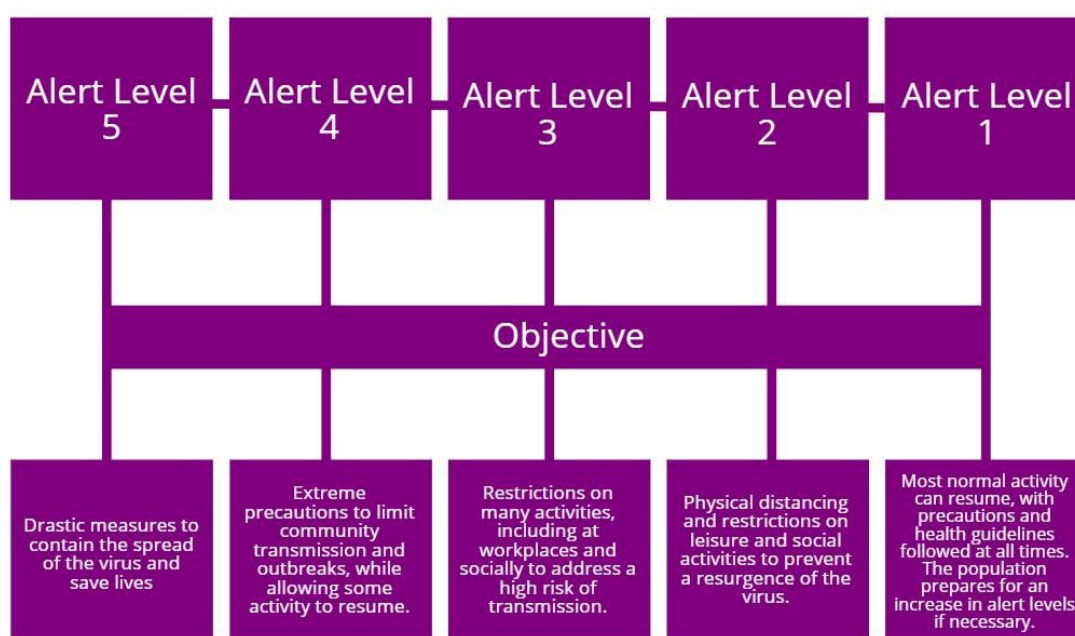
Geographic containment	15/3 - international flights banned. 27/3 – travel restrictions in the country. 1/5 to 7/5 – temporally lifted international travel.
Closures and prohibitions	15/3 – gathering of >100 people prohibited. 18/3 - (i) schools, colleges and universities closed. 27/3 – Prohibited all gatherings (i) non-essential shops; (ii) restaurants, bars and cafes; (iii) recreational parks and facilities were closed. 1/5 – Level 4 lockdown. Workers were allowed to return to work. Some industries reopened. Shops opened. Cigarettes and alcohol are still not for sale. Recreational parks, cafes, restaurants and bars remained closed. Universities, colleges and schools remained closed except for medical students in their final year.
Home confinement	27/3 – Home confinement with a curfew. Ban exercise outside the home. Essential activities between 08:00 and 17:00 hours were allowed.

	1/5 - Level 4, confined to home: 20:00 to 17:00 hours and my exercise between 06:00 and 09:00 hours – not in groups 5km from your home.
--	---

Source: (Haider *et al.*, 2020)

South Africa has been in the National State of Disaster for 750 days. This was an extraordinary, unprecedented situation in the Country's history. The figure below is a summary of the alert levels that were implemented and indicates the level of restrictions.

Figure 2 4: Alert levels



Source: (Government of South Africa, 2020)

The use of lockdown measures to control COVID-19 is undeniably complex. The benefits and harms of lockdown measures were not distributed equally among the people of the country, in addition to the wide-ranging health, social, political, and economic repercussions that produce both benefits and harms. Furthermore, the future will reveal

the full impact of lockdown measures and will only then be understood (Haider *et al.*, 2020).

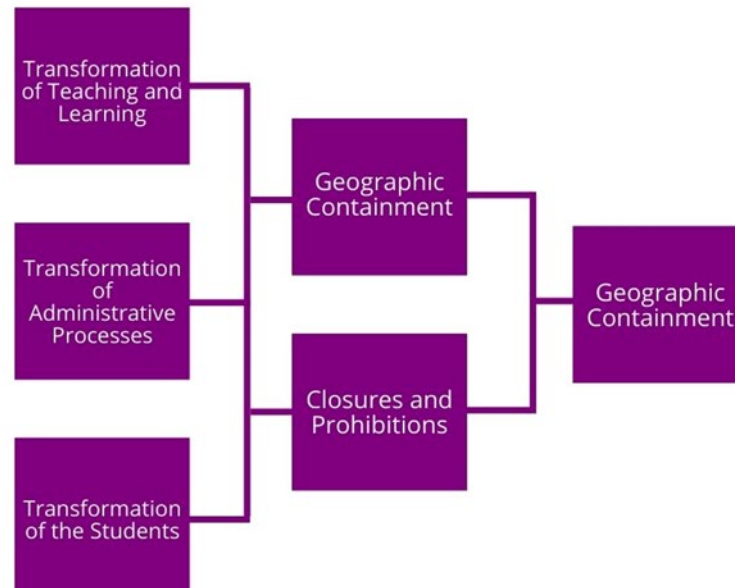
2.9 Disruption

Disruption is defined (Foss, 2020) as “radical and at least partially unforeseen changes that are exogenous to a set of interacting firms, such as industries or ecosystems”. He further states that the pandemic was largely unanticipated other than in the epidemiological sphere.

Large-scale disruptions have previously proven to significantly affect the socio-economic norms in industries and society at large. Society, and especially institutions, must adapt and innovate to survive catastrophic changes caused by unforeseen disruptive events (Kilkki *et al.*, 2018).

Society perceived the term “disruption” as a negative, but the devil term can be associated with words such as innovation and creativity (Kilkki *et al.*, 2018). The authors argue that disruption may very well bring positive changes to a system if the governing institution understands it well enough to transform effectively as shown in the illustration below.

Figure 2-5: Transformation of Higher Education Institutions: A rudimentary model.



Source: Adopted from (Krishnamurthy, 2020)

(Krishnamurthy, 2020) state that the Covid-19 pandemic was the cause of the largest disruption in the history of higher education. The author elaborates by explaining that students and faculty members alike were uprooted by swift and sudden changes in how lessons and interactions occurred after the status quo was disrupted by the pandemic. Measures were implemented almost immediately with institutions of higher education suspending in-person classes, international travel and remote-work arrangements with faculty staff (Krishnamurthy, 2020).

Gigantic changes were experienced therefore, the pandemic was a once-in-a-generation, also known as a “black swan” occurrence. Although the disruption affected public health, the consequences were far greater than anticipated and the following factors had to be taken into consideration (Krishnamurthy, 2020):

- Students’ mental health
- Physical and mental health of employees

- Unbudgeted short-term financial costs
- The effect on the overall future of student enrolments
- The financial stability of the higher education sector

(Chiparra *et al.*, 2020) describe the disruption caused by Covid-19 on higher education as a “cut” or “fracture and a break in its paradigm”. The authors also argue that higher education administrative processes suffered a significant disruption due to the pandemic.

By March 2020, mere months after the pandemic originated in Wuhan, China, (Huang *et al.*, 2020) already published the Handbook on Facilitating Flexible Learning During Educational Disruption: The Chinese Experience in Maintaining Undisrupted Learning in COVID-19 Outbreak. This is a clear indication that disruption was caused in education before the general public fully understood the magnitude of what the pandemic was resulting in.

2.9.1 4th Industrial Revolution

The founder and executive chairman of the World Economic Forum, professor Klaus Schwab, characterizes the Fourth Industrial Revolution (4IR) as “a range of new technologies that are fusing the physical, digital and biological worlds, impacting all disciplines, economies and industries, and even challenging ideas about what it means to be human” (World Economic Forum, 2020). The 4IR started in the early 2000s and as in all industries, HEIs are leveraging 4IR internet resources using them during unprecedented times (Khoza, 2020). (Khoza, 2020) argues the pandemic was a key accelerator for teaching professionals that started tapping into technological advances to better academic goals.

(Coetzee *et al.*, 2021) agree and state “[the] COVID-19 pandemic will accelerate these changes at a rate that was not anticipated even a few months before the spread of the virus to South Africa in early 2020”. For HEI to survive societal shifts in technological use, they must reform practices previously employed to reach operational goals and even more so prohibit any contribution to imbalances in the South African socio-economic sphere (Coetzee *et al.*, 2021).

2.9.2 Change Management

The process of mobilizing a person, a group of people, or an entire organization from one state to another so that a vision and operational goals can be carried out is known as change management (Junnaid *et al.*, 2020). The need for change in any organisation is never-ending but during the pandemic change needed to happen rapidly for various organisations to be sustainable (Bhattacharyya, 2020).

(Izumi *et al.*, 2020) write that one of the most significant changes that needed to be managed due to the pandemic was the shift from contact learning to online learning. Furthermore, the authors emphasize that although the majority of students are satisfied with online learning, others who are not satisfied face challenges in mental health, lack self-discipline and are panic-stricken about their courses.

Financial challenges due to students cancelling registrations, requesting refunds or not continuing their studies due to Covid-related challenges. The financial management and operations of HEIs are significantly impacted by the global economic recession. Leadership will need to plan for a wide range of potential outcomes, search for and implement innovative solutions, and remain adaptable in the face of ongoing change to survive these challenging times (Izumi *et al.*, 2020).

The (World Health Organization, 2021) summarises the essence of how institutional operations were affected by Covid-19: “The world’s response to COVID-19 has resulted in the most rapid transformation of the workplace . . . we’ve gone from digitizing the relationship between firm and customer to digitizing the relationship between employer and employee.” It can be argued that complicated and subjective processes such as HEI’s administrative processes, as stated in the Administrative Processes subtitle of this chapter, were inevitably affected by this transformation.

2.9.3 E-Learning

(Ansong *et al.*, 2017) state E-learning, also referred to as online learning, open and distance learning (ODL) or web-based learning, is a form of education completed by using electronic devices connected to the internet as means of communication. The authors also state this method is increasingly being adopted by HEIs worldwide to ensure

students are receiving the education for the relevant universities to fulfil its purpose of teaching.

(Dwikurnaningsih & Waruwu, 2021) believe that the largest effect of Covid on education systems across the globe was the transition to e-learning methods. (Bumblauskas & Vyas, 2021) state the Covid-19 pandemic resulted in the mass adoption of e-learning practices in all areas of education. Therefore, it can be argued that the pandemic left HEI no choice but to adopt e-learning methods to achieve operational goals.

Currently, internet resources are the main component of e-learning (Pham & Ho, 2020). E-learning can take place on websites, learning portals, video conferencing, YouTube or applications (Shahzad *et al.*, 2021).

2.10 Chapter conclusion

In this chapter, an overview was given of the pandemic and Covid-19 as well as the disruption caused by the pandemic on the population and HEIs. Chapter three discusses methodology and data collection in measuring the disruption caused by the Covid-19 pandemic.

CHAPTER 3 RESEARCH METHODOLOGY

3.1 Introduction

In chapter three the methodology and the research design are explained describing the target population and exploring the disruption caused by Covid-19 at a Higher Education Institution. Furthermore, the chosen data and collection thereof as well as the instruments used are discussed.

3.2 Research design and methodology

A research design is the framework of research methodologies and procedures used by a researcher to undertake a study. The design enables researchers to refine the research methodologies appropriate for the topic matter and set up their investigations for success (Question Pro, 2022).

The term "research methodology" simply refers to the practical "how" of any given piece of study. It is primarily about how a researcher systematically designs a study to produce accurate and trustworthy results that address the research aims and objectives (Jansen & Warryn, 2020). The methodology explains the method on how knowledge is gained.

3.2.1 Research philosophy

This study is based on a pragmatic philosophy. A pragmatic study focuses on a single decision-maker in a real-world context. The first step in conducting pragmatic research is identifying a problem and viewing it in its broadest context. This leads to research inquiry, which aims to better understand and, eventually, address the problem (Duram, 2010).

Furthermore, the study is based on a constructivist epistemology. Constructivism is an epistemology, a learning or meaning-making theory that explains the nature of knowledge and how humans learn. Only prior experience and background information can be used to develop a true understanding (Ültanır, 2012).

3.2.2 Research approach

A qualitative research approach was followed to gather the data. According to (Maree, 2016) qualitative research is seeking to understand the phenomena in the real world and in general. Therefore it can be stated that the research is done in real-life scenarios and not in experiments.

3.2.3 Population

The population of the study involves the stakeholders utilising administrative processes at the North-West University. The profiles for such individuals are North-West University students, parents, administrative staff, and academic staff.

3.2.4 Sampling

As described in chapter one the sample is a portion of the population to represent a sample. The population represents the sample in which the research is done. (Maree, 2016). Purposive sampling was done, as the population was relevant to the research conducted. The sample consisted of students, parents, administrative staff and academic staff. According to (Maree, 2016), the meaning of purposive sampling is that the participant selection is relevant to the research question and specific criteria. A non-probability sample was used and was not random. Purposive sampling is very successful in the collection of the data with a specific purpose in mind.

3.2.5 Sampling technique

Contextual information was collected through a thorough literature study exploring the disruption caused by the Covid-19 pandemic on higher educational institutions. Semi-structured interview schedules were used to gather the data in the research. Predetermined questions were asked to answer by the participant which allowed for discussion and probing in gathering information. The interviews were conducted to explore and gather data on the disruption caused by the Covid-19 pandemic on the stakeholders.

As a first sampling process, the researcher made use of the Corporate Communication Platform to invite prospective participants to the university. The different stakeholders were also contacted via telecommunication and email, in her work environment,

representing students, parents, administrative personnel, and academics to take part in the study. Secondary acquaintances were recruited by snowball sampling. There were no positional power relationships at play that prevented participants from participating.

Interviews took place keeping Covid-19 protocols in mind and were done on online platforms including Zoom, MS Teams, and WhatsApp video calls. In cases where the researcher met participants in person, the opportunity was utilised to do the face-to-face interviews, all necessary Covid-19 protocols were observed to ensure no harm came to either the participant or the researcher.

This process was continued until saturation and beyond were achieved in each of the four groups: students, parents, academics, and administrators. Before interviews were conducted, the terms of the informed consent such as anonymity, the right to withdraw, confidentiality, and the right not to answer specific questions, that there are no monetary or other rewards for participating, and that raw data will only be used for research, stored for a limited period and then destroyed was disclosed to participants, ending with the statement – “By continuing with the interview you permit the results of the interview to be used in the research”. Permission was obtained to record interviews for accurate transcription.

3.3 Chapter conclusion

In this chapter, the research methodology is discussed. The sample as well as the instrument was identified and elaborated on. In chapter four the data analysis will be discussed.

CHAPTER 4 DATA ANALYSIS

4.1 Introduction

This chapter discusses the analysis and the findings of the empirical data collected for the study. The interpretation of the data is used by the researcher to address the research question previously stated.

4.2 Data analysis

According to (Bryman *et al.*, 2014) there are three common strategies used for data analysis namely:

- Analytic induction
- Grounded theory
- Thematic analysis

Thematic analysis was used for this study. As indicated by (Bryman *et al.*, 2014) this approach is flexible and not bound to a certain philosophical orientation. Thematic analysis is the analysing of themes in the data to identify meaning. Better described as a study of patterns of meaning (Crosley & Rautenbach, 2021).

Thematic analysis is used to identify, analyse and describe the themes of a dataset (Bryman *et al.*, 2014).

The six-phase thematic analysis introduced by (Braun & Clark, 2020) as stated by (Byrne, 2022) is illustrated in the table below. These phases guide the researcher with the thematic analysis.

Table 4-1: Six-phase analytical process

Phase	Description
1. Familiarisation with the data	This entails reading and re-reading the entire dataset to become familiar with the data.
2. Generating initial codes	Coding the data systemically and marking the relevance of each code.
3. Generating themes	Organising the codes into themes and gathering the relevant data to the themes.
4. Reviewing potential themes	Check if the themes work concerning the coded data and the entire dataset.
5. Defining and naming themes	Each theme and sub-theme is to be expressed with both the dataset and the research question.
6. Producing the report	The final analysis of selected extracts and producing a scholarly report of the analysis.

Source : (Byrne, 2022)

This was exactly the process that was followed, although steps 3 and 4 were combined. What follows is a discussion of the steps that were followed during the analysis process. This will be followed by a detailed discussion of the responses to the different interview questions that were asked.

4.2.1 Step 1: Transcription of recorded interviews

All interviews were accurately transcribed by the researcher. Before each interview commenced, permission was obtained to record interviews for accurate transcription. Transcription or a transcript is defined as the written translation of a recorded interview with the identified sample (Bryman *et al.*, 2014).

4.2.2 Step 2: Coding

After the transcription was finalised and the accuracy was checked the researcher proceeded with the coding of the data. Coding is a universal part of the qualitative research process and is often under-considered in qualitative research (Elliott, 2018). In a qualitative study, a code is a word or short phrase that symbolically assigns data. (Elliott, 2018).

It is important to execute a comprehensive, and thorough coding process. The need for coding is simple: "Text data are dense data, and is time-consuming to go through the data and make sense of it" (Elliott, 2018).

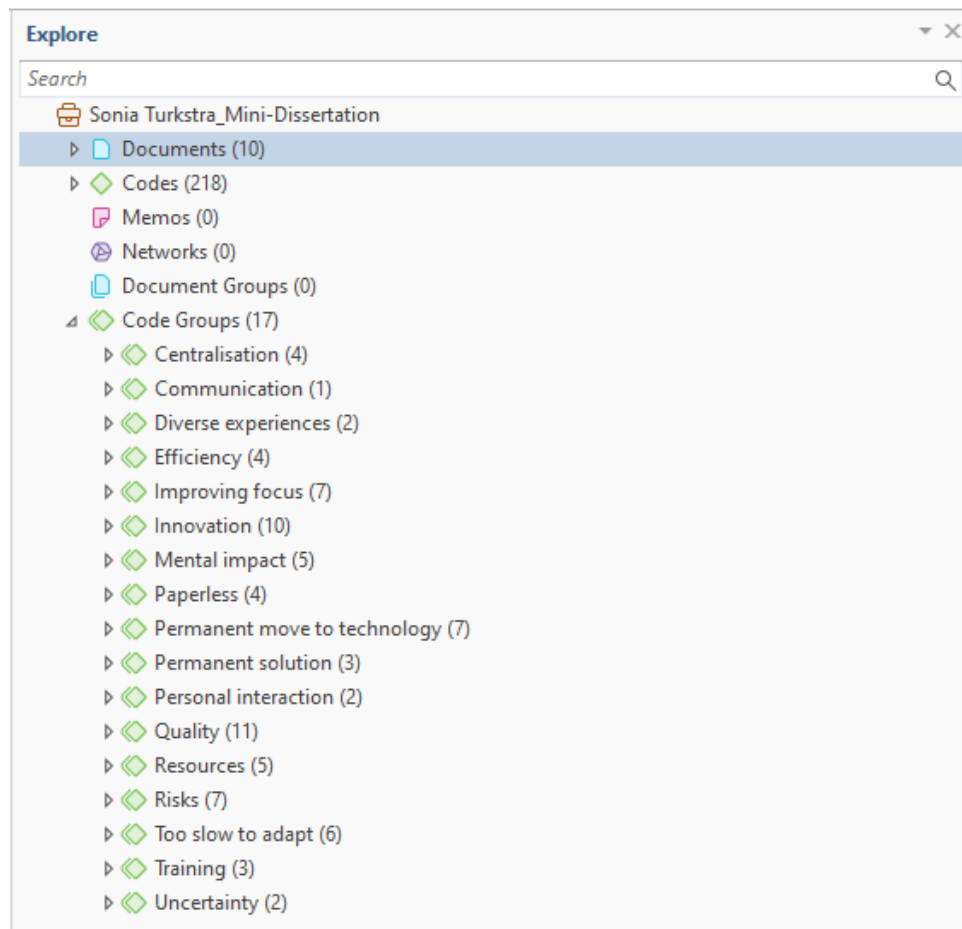
The qualitative analysis and research software ATLAS.ti²² was used for the coding and analysis process.

ATLAS.ti, which stands for Archiv für Technik, Lebenswelt und Alltagssprache (Archive for Technology, Lifeworld, and Everyday Language.text interpretation), is one of numerous computer-assisted qualitative data interpretation systems (Paulus, 2018).

ATLAS.ti was created as an interdisciplinary research project by psychologists, educational scientists, and computer scientists at the Technical University of Berlin from 1989 to 1992. Scientific Software Development GmbH produced the first commercial version in 1993. (Paulus, 2018).

After transcription, all interviews were attached to Atlas.ti. Then coding was done in stages, first by open coding, then by sorting and refining the code list by merging and splitting codes. In this study, 218 codes were initially identified. After identifying the codes, code groups were created, collating the applicable quotations of the participants. There were 17 code groups created, as shown in the illustration below.

Figure 4-1: Code groups



Source: Atlas.ti22

4.2.3 Step 3: Defining and naming themes

According to (Nowell *et al.*, 2017) a theme is an abstract entity that gives meaning and identity to recurring experiences and their variations. A theme, as such, encapsulates and unites the essence or foundation of the experience into a meaningful totality.

By analysing the code groups, five themes were identified. The process of identifying the themes was by first identifying the code groups that were mentioned most often. Then these were grouped into common issues and from that, a link was established between these common denominators and the quotations from which the codes were extracted. The themes that emerged were those that featured in the interviews with all the participants.

The researcher identified the following themes from the code groups:

Theme 1: Uncertainty increased and stabilised with time

The first theme that emerged very clearly was that the move to a new way of work created major uncertainty, but that the uncertainty dissipated as soon as the people got used to the new way of working. The same uncertainty was experienced when the lockdown was eased but to a lesser degree. This could be seen from the following quotations.

Participant 1: *"I think that...a lot of students, including myself at one point was so uncertain about the entire process on how to go about it, and I think a lot more light should be shed on that entire process because a lot of students at least the ones I'm mentoring constantly asked like what happens next year. You know they are uncertain whether they have to re-register, which is a bit alarming, because obviously they do have to re-register, but there's just a lot of confusion about that."*

"A lot of students are still uncertain whether we're going to have contact sessions next year or online learning, so there's a lot of confusion pertaining to the registration and the application process and the learning itself."

Participant 4: *"Everything was very confusing"*

Participant 5: *"Well, after the lockdown, I think things uhm slowly but surely got back to normal."*

Theme 2: Communication was very disrupted

The issue of communication was also mentioned very often. A breach in communication was experienced by all groups: parents, students and personnel. The following quotations show how participants experienced the break in communication.

Participant 1: *"So, I think the university can improve it through better communication channels and let the students know ok fine next year this is what's going to happen. This is the protocol to follow et cetera, et cetera."*

Participant 3: *"Uhm a better communication because like I said I was so lost with regards to uh in the first year or two know where I was, my position was in the university so like better communication may be a more organized process, so people don't get confused about where to go next."*

Participant 5: *“during the lockdown, it was quite difficult, first communication was slower it did take place, but it was slower. You have to uhm send emails, phone people maybe be on... on a previous point is that what did help is that uhm there was an open-door policy, so it was really easier to talk to staff members regarding any type of challenges so that this couldn't happen during the lockdown.”*

A few participants also proposed how the issues of communication can be resolved:

Participant 7: *“Would be nice uhm if the students that read the communication that we send to them for their parents also like to tend not to read all the communication that we sent to them and we are still in the process of improving... there's a lot of room for improvement even with the accommodation and the allowances that we buy out to students if that can be in a way be more automated, it will, it will be wonderful.”*

Participant 10: *“You know uhm centralized communication, certain documentation, centralized it, so that staff members know that you know it needs to go through this process and then we will be sure that you know everybody is following the same approach everybody is following for instance, if a lecturer, have to give feedback that we know, ok, this is the basic feedback that you have to give.”*

Theme 3: Training

The issue of training was mentioned most often by staff, stating that the lack of training could have prevented several of the problems experienced.

Participant 6: *“Uh. I think in my environment, training colleagues to be more adaptable to new technology. Uhm.. unfortunately, changes are not for everybody, and uhm they are set in certain ways. Yes.”*

Participant 10: *“So while we use the technology we need to give the training to ensure that when we use that technology, the product that we're putting out there, or the communication that's going out. Or marks that are going out or whatever it is that goes through the administrative process will still be qualitative because at the end of the day it reflects on the institution and it reflects on the person in that office, but we will have to look at... to give the staff quality training, reduce certain uhm workloads... uhm I want to say give certain people a certain training. But we will have to be innovative and think of how we're going to do this because we must tell one another that pre-COVID processes*

might have to be changed but then we also have to provide training for those staff members. We will have to put these administrative processes in place for it to be a quality process.”

Theme 4: System inadequacy

The topic of system inadequacy came to the fore, especially noted by students and staff during the lockdown. The current system was to be found inadequate during the lockdown period and even after the lockdown as everybody was exposed to the new way of working electronically, several departments decided to go paperless.

The theme of system inadequacy is intertwined with technology development, as suggestions were made on how to resolve the issues.

Participant 1: *“I think that the entire system needs to be reconfigured cause uhm like I said, I only found out in April time, that I was accepted for my master’s and apparently and like all of my other master’s peers started in Jan. So, I was way behind, and I thought there was quite odd. Uhm so as far as quality insurance go think just having a better application system, or a registration system would work for me”*

Participant 3: *“So. Uhm, I would think like making... I don't know a document or something to help students like say, this is where you know, like well, it's all there on the website I would say but sometimes it's like so hard to find everything in the same place, so I would think maybe like that.”*

Participant 5: *“Yeah, I think this will more or less be part of seven and then it is very integrated but we need to ok... get back to basics but we need to get our manuals in order or a processing operations system or whatever you call it, but we need to.. to have uhm resources available, but not only available but in a working, but efficient”.*

Theme 5: Technology development

Technology development was emphasised by several of the participants as all the stakeholders are reliant on technology to execute daily tasks. The pandemic forced technology adaption because of the change in the work and teaching environment which became an important point of discussion.

Participant 5: *"For instance, look at big best practices but with a new view with a new approach. Ja with a new approach so you can really look at current processes, but really think about it... think out of the box with this new situation with new ways of using electronic platforms... Uhm? Electronics new platforms. There is definitely specific in each and every category of administration, and application registration whatsoever of them there can be best practice, but we must utilize all the necessary electronic platforms and, not go back to old ways"*

Participant 6: *" My recommendation is to go paperless and uhm and to adapt not being in the office all time, which we don't know what COVID is going to do in future as well, but to adapt in such a way that you can ... uhm work anyplace anyway from if it's not in the office. So why I'm saying paperless is the quality is assured by better record keeping up via recording or copy saved electronically on various platforms and just kind of had you kind of have an electronic paper trail."*

Participant 7: *".... I'm a person that like uh, reports. If the computer can automatically send you some kind of report we have a few of them uhm as I said, there's still a lot of room for improvement. Uhm, so I would like a report that will pop up on my screen if... we are in the process to overpay a student. Uhm we also work closely with an internal audit that does certain checks and balances for us. Uhm, and then we are currently busy with something on the sideline also to help improve the payout process for us and give us more clean data to work with. So yes we constantly ... there's something going on."*

Participant 8: *"My recommendation would be a universal system or programme which enables both Faculty and Higher Degrees to upload documents, give permissions and at least confirm that certain procedures have been completed and to submit supporting documents at the same time. Not like the current M-drive which we currently use. So as to enable both Faculties and Higher Degrees to have access to the student's progress. For example, instead of uploading a progress report to an electrical file held by the faculty, instead having a programme upon which this progress report can be uploaded ... this way Higher Degrees will also have a record of the faculty processes and progress of the student."*

Participant: 9 *"So paperless is something that changed and then also I think there's also changing the use of technology. Uhm, I see, myself included uhm No, I don't know if*

anyone not using two screens for example anymore. So there are, you know, lots of new uhm technology that makes... your work easier and less strenuous, faster and more efficient.”

Participant 10: *“I think people learned uhm when COVID was here and things for awhile stopped so people had to be innovative and think of things and think of new ways to implement and think of new uhm technology to implement. To make the processes work, and uhm I think it's gotten better from where we started in 2020 when COVID hit and some processes have gotten better, but there's still a big backlog because technology is not everybody's friend. Technology can not do something that a person that's been doing it for 10 years now an app needs to do it. There are going to be mistakes. There is the risk of you knowing the quality ... of the work. So yeah, I think it's better, but there's still a lot of innovative ideas. It must come to the front so that the process can run smooth again.”*

4.3 Data finding and discussion

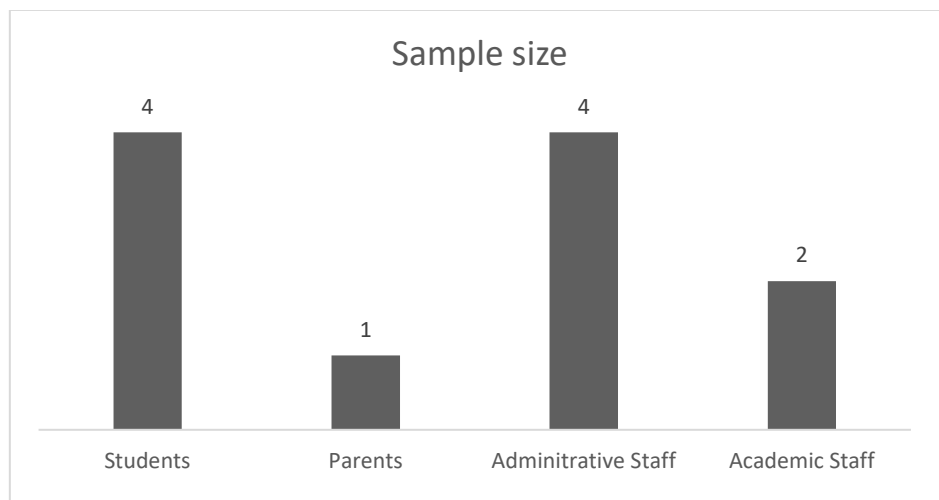
Using the thematic approach the data findings of the interviews conducted are discussed. The causal relationships between the themes are interrelated and cohesive.

As explained the data was collected using semi-structured interviews with ten participants affiliated with the North-West University and are seen as stakeholders.

Question 1: In which way are you connected to the HEI (student, parent, academic, administrative personnel)?

As indicated in the figure below, the participants consisted of four students, one parent which was part of the administrative personnel as well, two academic staff members and four administrative personnel.

Figure 4-2: Sample size



Source: Created by the researcher

Question 2: How long have you already been involved with the HEI?

The average number of years that the stakeholders were involved with the North-West University was nine years with the shortest period of two years and the longest indicating their involvement of twenty-one years as illustrated in the figure below. Therefore it is clear that the participants are familiar with the administrative processes of North-West University.

Figure 4-3: Years affiliated



Source: Created by the researcher

Question 3: Which administrative process are you involved in? (application, registration, lectures, marketing, examination, marks processing, lecturing, etc)?

P1, P2, P3, and P4, were students and therefore their involvement in administrative processes was mainly the following:

Application: The four participants experienced the application process from the viewpoint of a student and were interviewed in their capacity as students, although two of them were employed by the university in as academic assistants.

Registration: As students, the registration process forms part of the student's academic life cycle. Some of them were registered before the lockdown but had to re-register during the lockdown.

Attending lectures: Lectures are one of the main activities of being a student. Students had to adapt to online teaching during the lockdown.

Writing exams: Examination is part of the assessment of students. The examination process had to be adapted to accommodate the online environment during the lockdown.

Furthermore, P5, P6, P7, and P8 were administrative staff. They were involved in the following operational administrative processes:

Applications: Administrative staff is involved with the screening and approval of new applicants at the NWU. Two of the participants are involved in the application process.

Finances: student accounts and bursaries: This is a division of the financial department of the NWU that deals with student accounts and the payment of student bursaries. This was a face-to-face environment and had to adapt during the lockdown to an online process. Participant seven is the manager of the student account and bursaries department.

Registrations: Participant five is involved in the registration process. The approved applicants need to register for the academic year and current students need to re-register for the new academic year. The administrative staff is involved in assisting students with the process to ensure that students register for the correct programmes and modules using the curriculum control process. This was a mixed process but during the lockdown, all the registrations and re-registrations had to adapt to an online process.

Administering the examination processes: Participants five and eight are administering the examination process in an undergraduate and postgraduate environment.

Administering the marks processing: After students completed the exams the marks need to be processed and updated on the university system to update the student record and for graduation purposes. Participants five and eight are involved in this process for undergraduate and postgraduate students.

Research funding: This process entails the administering of NRF bursaries. Participant six is employed as a senior research support officer. This entails the management of issuing bursaries to NRF grand holder students and research bursaries.

Administering the graduation process: After successful completion of the examination and therefore completing the degree, the student then graduates. Participants five and eight are part of finalising marks for graduation purposes. The official graduation ceremonies were affected by the lockdown and during this period, the graduation ceremonies were discontinued and were replaced with an online announcement.

The academic staff were presented as P9 and P10. They were part of the following administrative processes:

Lecturing: Participant nine and ten are academic staff and is involved with teaching and learning. The teaching was converted to online lecturing using ZOOM and TEAMS applications. During lockdown consultations with students were conducted online and from the interviews with the students, it was found that this was a challenge as lecturers did not avail themselves.

Examination: Drafting examination papers are part of the lecturer's responsibilities and form part of the student assessment process. During the lockdown, this process had to be adapted to continuous assessment, due to online lecturing. Students had to submit various projects that would form part of their final mark.

Marks processing: After the examinations were completed, the exam papers were marked and the marks were submitted for uploading on the university system.

Question 4: Please tell me how you experienced the administrative processes before the Covid-19 lockdown. (prompt: error-free, fast, efficient, etc.)

The comments of P1 to P4 which represents students were positive and indicated as efficient and timeous. Lecturers were available for face-to-face consultations, and better communication was experienced. P4 indicated that *“there was better communication”*. P5 to P8 represent administrative staff. Terms like *“easier”* came to the fore concerning problem-solving, and availability of colleagues. *“services was more prompt and efficient”* as indicated by P6. The environment in which P7 functioned was paper-based and dealt with a lot of walk-in clients which consisted of students and parents. Because of personnel shortages, P8 worked under a lot of pressure in indicated that *“the workload was incredibly high”*. The same comments were received from P9 and P10 and P10 stated that *“it was more efficient and it was fast”*.

The researcher observed that the overall experience of the administrative processes before Covid-19 was efficient and fast and support was easily accessible. The literature defines administrative processes as office duties needed to keep an organisation functioning effectively and efficiently (Velacation, 2022).

Question 5: Please tell me how you have experienced the administrative processes during and after the Covid 19 lockdown.

There was unanimously a feeling of inefficiency stated by participants P1, P2, P3 P4, and lack of timeous feedback from administrators as well as academic staff. P1 indicated *“I know that students do suffer”* although P1 also stated, *“that I must applaud the NWU for the systems they've put in place”*. Furthermore, P3 mentioned that students had to get used to the online processes as classes were presented online. P4 indicated that at some stage everything and all the processes came to a halt, and *“everything was very confusing”* and *“that certain processes couldn't adapt fast enough to support our students and support our staff during this time”*.

Participants 5 to 8 experienced unforeseen changes in conducting day-to-day tasks. Abrupt changes in communication had to be adapted. P6 indicated that *“it took longer to obtain information”*. All the process that was previously paper-based had to be converted to an electronic format. The communication platforms changed to electronic platforms utilising emails, SMS, ZOOM and TEAMS. Administrative and academic staff had to work

from home which caused pressure on those individuals with families, struggling to manage the work-home scenario and having to care for and home-school their children. P8 also mentioned that *“one negative from working from home was that I would end up working way more hours than prescribed”*.

(Chiparra *et al.*, 2020) stated that Covid-19's disruption of higher education is described as a "cut" or "fracture and a break in its paradigm." The authors also claim that the epidemic caused considerable disruptions in higher education administrative processes.

P9 indicated *“there were challenges and there were of course also success stories”*. One of the positives mentioned was the fact that we had to move away from a paper-based mode to an electronic mode of work. Furthermore, everybody was forced to use technology to execute their duties. P10 stated, *“there was chaos because people weren't sure”*. Furthermore, backlogs developed and processes slowed down as the industry was under pressure, and urgent measures had to be put in place to accommodate the stakeholders.

From the literature, it is learned what the impact of disruption can be. (Krishnamurthy, 2020) state that the Covid-19 pandemic caused the largest disruption in higher education's history. The author elaborates by explaining that students and faculty members alike were displaced by swift and sudden changes in how lessons and interactions occurred after the status quo was disrupted by the pandemic.

Question 6: Which administrative processes do you think have improved and which have deteriorated? Please explain why you say so.

Participants 1 to 4 agreed that the communication channels with students deteriorated. P3 stated that the lectures deteriorated as students did not attend class regularly. P5 indicated that the pandemic made everybody aware of being innovative and to relook at our processes to function in an online environment and enforce best practices. P6 mentioned that *“there are always new challenges to meet and a better way of doing things. I can therefore not think of a process that deteriorated as we adapted our processes to fit our current situation”*. P9 mentioned that *“I think without the personal communication and interaction, our communication, also deteriorated”*. P10 also agreed on the lack of communication and face-to-face contact with colleagues and students.

Khoza (2020:248) argues the pandemic was a key accelerator for teaching professionals to utilise technological advances to better academic goals.

P4 and P6 mentioned the DIY360 platform that was implemented and is regarded as a major improvement. P7 confirmed that *“thanks to COVID-19 we have reverted to an electronic online process”* and that their department is not going back to the old processes. P8 also agreed that the electronic online processes are an improvement. P9 and P10 confirmed that technology is an improvement.

Question 7: If you can change something regarding the administration, what would it be?

P1, P2, P3, and P4 suggested the following: clear communication with students about administrative matters and processes. They also confirmed that there is a need for feedback to be given timeously. P5 stated *“we should look at best practices but with a new view and a new approach and we must utilise all the necessary electronic platforms and, not go back to old ways”*

P6 and P8 mentioned that there is a need to train colleagues to be more adaptable to new technology. P7 indicated that students and parents do not read the communication that was sent to them, therefore unnecessary delays were created and there is still room for a lot of improvement. P9 mentioned that during the pandemic lecturers tended to be more flexible, and therefore a tendency for not keeping to cut-off dates developed. This created delays and should be stopped immediately. P10 suggested that the processes in the faculty should be aligned to enhance quality.

We learned from the literature that the need for change in any organisation is inevitable but during the pandemic change needed to happen rapidly for various organisations to be sustainable (Bhattacharyya, 2020:19).

Question 8: What recommendations would you suggest to improve the administrative processes for quality assurance? Please explain why you say so.

P1, P2, P3 and P4 suggested that the application and registration processes be re-visited and revised as it is currently not user-friendly. Suggested that there should be a central

point of contact for 1st-year students. Furthermore, they suggested online platforms for all administrative processes that are easily accessible.

P5 stated that the institution needs to do the right things right. P6 recommended going paperless and adapting to not being in the office all time. We don't know the future COVID-19 status. Therefore we need to be prepared to work from anywhere anyway from the office. P7 and P9 noted that the institution should continue to be paperless taking the environment into account as well as the fact that quality is assured by better record-keeping, saving records electronically on various platforms. P7 furthermore suggested automatisation and system-driven reports that would enhance an accurate and timeous process flow. P8 suggested a universal system or programme as well.

P7, P8, P9 and P10 agreed that training staff members in utilising electronic platform are compulsory for the future. Dwikurnaningsih and Waruwu (2021:670) believe that the largest effect of Covid on education systems across the globe was the transition to e-learning methods.

P9 mentioned the importance of strategic planning and stated “ *we are missing something if we are not all strategically, thinking together about processes, aims and objectives*”. P10 indicated that innovation and being innovative will promote quality in the processes and teaching of students.

The suggested practical guide for qualitative research was followed in the data analysis process and is outlined in the table below:

Table 4-2: Braun & Clarke 15-point Thematic Analysis Checklist

Process	No	Criteria
Transcription	1	The material has been transcribed to a sufficient level of detail, and the transcripts have been checked for 'accuracy' against the tapes.
Coding	2	During the coding process, each data item received equal attention.
	3	Themes were not developed from a few vivid examples (an anecdotal method), but rather

		through a thorough, inclusive, and comprehensive coding process.
	4	Each theme's pertinent extracts have been compiled.
	5	Themes have been compared to one another and the original data set.
	6	Themes are consistent, consistent, and distinct.
Analysis	7	Rather than just paraphrasing or describing data, it has been analyzed, understood, and made meaning of.
	8	The analytic arguments are shown by the samples, which fit the analysis.
	9	The analysis presents a compelling and well-structured tale about the data and topic.
	10	There is an excellent blend of analytical narrative and illustrated excerpts.
Overall	11	Enough time has been set aside to finish all parts of the analysis effectively, without rushing through any of them or giving them a cursory once-over.
Written report	12	The assumptions and approach of thematic analysis are well explained.
	13	There is a solid match between what you claim you do and what you show you have done—that is, the approach specified and the analysis presented are consistent.
	14	The report's language and concepts are congruent with the analysis's epistemological viewpoint.

	15	The researcher is positioned as an active participant in the research process; topics do not just 'surface.'
--	----	--

Source : (Bryman *et al.*, 2014)

4.4 Chapter conclusion

Data was collected using semi-constructed interviews and the thematic analysis was followed. This gave the researcher a better understanding of the perceived topic and the experiences of the stakeholders utilising administrative processes. Themes were identified that manifested throughout the interviews. In the next chapter, the conclusions and recommendations will be discussed and the level of achievement of the research objectives will be evaluated.

CHAPTER 5 FINDINGS AND RECOMMENDATIONS

5.1 Introduction

In chapter five the findings related to the empirical as well as the literature study will be discussed. Further, the researcher refers to the research question and the objectives and evaluates if the objectives were achieved.

Recommendations will be made based on the research, on how HEI with specific reference to the NWU where the study was conducted be prepared for future disruptions.

The research question that needs to be addressed: What disruption was caused by Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution?

5.2 Summary of findings

When looking at the data, there was a clear indication of the five themes that manifested. These themes are interrelated and applied to one or more aspects of the study. This led to causal relationships between the themes that were identified.

5.3 Causality

Causal or explanatory research assists organisations in determining how to present activities and behaviours that will affect them in the future. It is also referred to as the cause-and-effect relationship between variables. After finalising a causal study, an organisation will be able to improve its business strategies and focus on what is needed in overcoming setbacks (Question Pro, 2022b).

5.3.1 Communication

The first causal relationship that emerged from the study is that poor communication and training affected other themes. Lack of communication led to uncertainty which stabilised as time passed *“I would say the university could improve its administration process through communication, just communicating with the students and letting them know what's going to happen. A lot of students are still uncertain whether we're going to have*

contact sessions next year or online learning, so there's a lot of confusion pertaining to the registration and the application process and the learning itself."

Also, the study found a significant relationship between the lack of communication and system inadequacy and the uncertainty it caused. This affected the stakeholders negatively in utilising administrative processes *"can say there was chaos because people weren't sure"*. The current university system that was in use was inadequate for the situation that occurred *"Uhm better communication was needed uh ... cause like I said I was so lost with regards to the first year or to know where I was, my position was in the university so like better communication may be a more organized process, so people don't get confused about where to go next."*

5.3.2 Technology development

The North-West University was not ready with regards to online administration, as this is a contact university. This was evident from the following quotation *"it felt like everybody, everything stopped and we couldn't adapt fast enough to support our students and support our staff during this time"*. Nobody could predict to what extent the disruption would be. The unprecedented pandemic and the disruption it caused, forced rapid technology development to accommodate students attending online classes, and lectures lecturing via online platforms like ZOOM and TEAMS *"I think people learned uhm when COVID was here and things for a while stopped so people had to be innovative and think of things and of new ways to the new uhm technology to be implemented. To make the processes work, and uhm I think it it's gotten better from where we started in 2020 when COVID hit and some processes have gotten better, but there's still a big backlog because technology is not everybody's friend"*. The cause and effect found in this scenario were that the stakeholders were not equipped and trained to utilise the available technology *"I think in my environment, training colleagues to be more adaptable to new technology"*.

5.3.3 New technology training

The staff members with specific reference to administrative staff and academics were confronted with new technology in executing their daily tasks. Online meeting and tutor platforms for instance ZOOM and TEAMS were utilised. Nobody was prepared, as these platforms were never used before *"So while we use the technology we need to give the training to ensure that when we use that technology, the product that we're putting out*

there, or the communication that's going out, marks that are going out or whatever it is that goes through the administrative process will still be qualitative because at the end of the day it reflects on the institution and it reflects on the person in that office, but we will have to look at... to give the staff then also they quality training, reduce certain uhm workloads... uhm I want to say give certain people a certain thing".

This caused even more uncertainty and a lot of risk factors came to the fore:

- Inefficiency

Firstly administrative and academic staff had to work from home. They had to adapt and not everybody had an equal work ethic. Furthermore, the staff also had to deal with homeschooling and had to find a balance between working from home and dealing with family matters *"Phoning from home was not always possible unless you use platforms like Skype and WhatsApp call uhm colleagues worked different hours to accommodate their family's needs the during this period"*.

- Lack of quality service and teaching

There were issues providing quality service. Not all the stakeholders were technology literate, and previously they could depend on the IT services of the NWU *"we need to do the right things right, we need to get back to basics, we need to get our manuals in order or a processing operations system or whatever you call it, but we need to have uhm resources available, but not only available but working "*. The students did not attend online lectures as they would have, should lectures be face-to-face *"I think it would be lectures because not everyone attends lectures now that it's online. They're not forced to be there, so people aren't attending, which means there's less like, well, uh fewer people there to actually do the work. So yeah, I think lectures definitely have uhm deteriorated"*.

- The was an emotional impact on staff and students

The interviews emphasised the emotional impact that was experienced by the stakeholders. Everybody had not only to deal with the pandemic and the fear of contracting this highly contagious virus or losing a loved one but had to adapt because life moved on. Terms like feeling lost did not know what was going on, and a lot of hurdles and crying were mentioned *"The ones that phoned and I can really confirm*

the fact that every single last one of them was actually very emotional. Those were typically people that, already started crying”.

- Lack of resources for students and staff

When the national state of disaster was announced, nearly everything came to a halt. The stakeholders had to work and study from home. One of the biggest challenges was that not everybody had access to the necessary resources. This entails devices like laptops and another challenge was the costly data. After a lengthy process, the institution made devices available to students and provided data to students and staff *“but we need to have uhm resources available”.*

- The stakeholders were too slow to adapt to the new normal

The institution converted from a contact university to an online teaching mode overnight. As gathered from the data collected the adaption process was slow experiences shared were that some stakeholders were reluctant to change *“everybody had to adapt and it felt like the administrative processes couldn’t adapt fast enough. Uhm to support the students uhm to finish their curriculum.* This had impacted the efficiency of outputs of service delivery.

5.4 Recommendations

The recommendations are based on the conclusions and findings of the data collected. Since there is a causal relationship between the five themes that were identified, being that communication (theme number 2) and training (theme number 3), and to a lesser extent investment in technology (theme number 5) influence the other two themes, uncertainty (theme number 1) and system inadequacy (theme number 4). The major recommendations concern communication, new technology and training.

5.4.1 Centralised student communication platform

The above recommendation is derived from the student stakeholder group. The overall experience was the lack of communication, and information provided. The students felt

misinformed and lost. Although North-West University developed a platform for students during the pandemic period the majority of the students did not utilise the DIY360 platform. The casual relationship described in paragraph 5.4.1, indicated the importance of communication in an uncertain environment.

5.4.2 Technology and training

During the pandemic, face-to-face interactions came to a halt, and therefore students, administrative staff as well as academic staff had to adapt to technology. The transition was abrupt, and no training was available. The stakeholders utilising the technology experienced enormous constraints in executing their duties. Therefore the recommendation for sufficient training in various areas of technology came to the fore.

5.4.3 Paperless environment

During the pandemic, processes adapted to a paperless environment. This was strongly recommended for the following reasons: it lesser impact on the environment, it was cost-effective, saves time spent on filing and organising. An electronic-based data system is secure and easy to access. The recommendation is that the paperless environment should be maintained and strengthened and that paper-based systems be digitised. This included digitally capturing any paper-based records of the period before the disruption.

5.4.4 Technology development

The current system of the NWU was outdated, and the recommendation for a newly developed student information system was unanimously recommended. There is a need for extracting reports and data in various areas of administration. Based on the causal relationship described in paragraph 5.4.2, this recommendation needs urgent attention.

5.4.5 Sufficient resources

During the pandemic, the NWU encountered enormous financial burdens concerning providing laptops and data to students and personnel. Although this was inevitable, certain prerequisites can be put in place, for instance, that enrolled students must have access to a computer and the internet. Concerning administrative personnel, when replacing devices the institution should consider allocating laptops instead of desktop devices.

5.5 Achievement of the objective of the study

The primary objective of the study is to explore the disruption caused by Covid-19 on stakeholders utilising administrative processes at a Higher Education Institution. This objective was reached, as described in paragraphs 4.3 and 5.3.

The secondary objectives were:

- to identify what the disruption involves. This objective was reached in chapter 2 and the level to which it was reached was described in paragraph 2.10.
- what administrative processes were utilised by the stakeholders? This was clearly described by the stakeholder in paragraph 4.4.
- to make recommendations in solving the disruption caused by the Covid-19 pandemic. This objective was reached in the final chapter of this study.

5.6 Recommendations for future research

- Extend to other universities and tertiary institutions.
- See whether the same issues are experienced in basic education.
- Prepare a framework for risk management to reduce the impact of future disruptions. Since this would involve work that is on a PhD level, this is outside the scope of this study.

5.7 Limitations

The researcher is affiliated with North-west University and therefore the sample is limited to this particular institution. The limitation is geographical demarcation, as this study focuses on a higher education institution in the northern part of South Africa. The situation at other institutions throughout South Africa, which may include TVET colleges as well, was not considered. Therefore the greater disruption caused by the pandemic was not investigated.

Furthermore, as the pandemic developed in 2020, limited literature was published regarding the impact it had on administrative processes, limiting the literature study's extent.

5.8 Chapter conclusion

The findings derived from the interviews were interrelated. The casual relationships discussed in paragraph 5.4 indicated the two main themes namely lack of communication and technology development as noted from the interviews. This confirms the importance of combatting future disruption by acting proactively and focusing on effective communication and efficient technology development.

REFERENCES

Adeoye, I., Adamolom, A. & Adanikin, A. 2020. COVID-19 and E-Learning: Nigeria Tertiary Education System Experience. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 5(5):28-31.

https://www.researchgate.net/publication/341574880_COVID-19_and_E-Learning_Nigeria_Tertiary_Education_System_Experience

Akinyeye, T.V. 2019. Administrative effectiveness in university system: the trajectory of students' involvement in governance. *Journal of Education Research and Rural Community Development*, 1(1):73-88. <https://journals.co.za/doi/pdf/10.10520/EJC-19ae189ef2>

Al-Hosaini, F.F. & Sofian, S. 2015. A review of balanced scorecard framework in higher education. *International Journal of Research and Innovation in Applied Science (IJRIAS)*, 5(1):26-35. <https://dergipark.org.tr/en/download/article-file/366698>

Ansong, E., Boateng, R., Boateng, S.L. & Anderson, A.B. 2017. The nature of E-learning adoption by stakeholders of a university in Africa. *E-Learning and Digital Media*, 14(4):226-243. <https://doi.org/10.1177/2042753017731235> Date of access: 2022/11/28. 10.1177/2042753017731235

Bhattacharyya, D.K. 2020. Normative change management model in Covid-19 pandemic *Journal of Research in Administrative Sciences*, 9(1), <http://jraspublications.org/index.php/jras/article/view/39>
<https://doi.org/10.47609/JRAS2020v9i1p3>

Blumberg, L. & Frean, J. 2020. *COVID-19 Second wave in South Africa*. <https://www.nicd.ac.za/covid-19-second-wave-in-south-africa/> Date of access: 30 Aug. 2022.

Bryman, A., Bell, E., Hirschsohn, P., Dos Santos, A., Du Toit, J. & Masenge, A. 2014. Research methodology: business and management contexts. In. 6th ed. Cape Town: Oxford University Press.

Bumblauskas, D. & Vyas, N. 2021. The convergence of online teaching and problem based learning modules amid the COVID-19 pandemic *Electronic Journal of e-Learning* 19(3), <https://doi.org/10.34190/ejel.19.3.2295>

Byrne, D.A. 2022. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity International Journal of Methodology*, 56(3):1391-1412. <https://doi.org/10.1007/s11135-021-01182-y> 10.1007/s11135-021-01182-y

Chiparra, W.E.M., Vasquez, K.M.C., Casco, R.J.E., Pajuelo, M.L.T., Jaramillo-Alejos, P.J. & Morillo-Flores, J. 2020. Disruption caused by the COVID-19 pandemic in Peruvian University Education. *International Journal of Higher Education*, 9(9), <https://doi.org/10.5430/ijhe.v9n9p80> doi:10.5430/ijhe.v9n9p80

Coetzee, J., Neneh, B., Stemmet, K., Lamprecht, J., Motsitsi, C. & Sereeco, W. 2021. South African universities in a time of increasing disruption. *South African Journal of Economic and Management Sciences*, 24(1), <https://sajems.org/index.php/sajems/article/view/3739> Date of access: 11 May 2022. <https://doi.org/10.4102/sajems.v24i1.3739>

Cornell Law School. 2017. *Legal Information Institute*

<https://www.law.cornell.edu/uscode/text/38/3452#f> Date of access: 11 May 2022.

Coughlan, T. & Lister, K. 2018. The accessibility of administrative processes: Assessing the impacts on students in higher education. In. *Conference proceedings 15th International Web for All Conference*. New York: Association for Computing Machinery pp. 1-10.

Crosley, J. & Rautenbach, E. 2021. *What (exactly) is thematic analysis?*

<https://gradcoach.com/what-is-thematic-analysis/> Date of access:

Department of Employment and Labour. 2020. Disaster Management Act: Consolidated Coronavirus COVID-19 Direction on Occupational Health and Safety Measures in Certain Workplaces. (Notice 639). *Government Gazette*, 43400:19, 4 June.

Duram, L.A. 2010. Encyclopedia of research design. In: Salkind, N.J., ed. Thousand Oaks, California: SAGE Publications, Inc. pp. 1073-1075. Available from:

<https://methods.sagepub.com/reference/encyc-of-research-design>.

10.4135/9781412961288

Dwikurnaningsih, Y. & Waruwu, M. 2021. The effectiveness of online based learning in universities during the Covid-19 pandemic *Journal of Education Technology*, 5(4),

<https://doi.org/10.23887/jet.v5i4.35337>

Ehlers, T. & Lazenby, K. 2014. Strategic management process a South African perspective In: Lazenby, K., ed. 4. Pretoria Van Schaik Publishers p16.

Elliott, V. 2018. Thinking about the coding process in qualitative data analysis. *The Qualitative Report*, 23(11):2850-2861.

<https://www.proquest.com/docview/2155621346?pq-origsite=gscholar&fromopenview=true#>

Foss, N.J. 2020. Behavioral strategy and the COVID-19 disruption. *Sage*, 46(8),

<https://doi.org/10.1177/0149206320945015>

Government of South Africa. 2020. *Alert levels summary*. <https://www.gov.za/covid-19/about/about-alert-system> Date of access: 27 Aug. 2022.

Haider, N., Osman, A.Y., Gadzekpo, A., Alkipede, G.O., Asogun, D. & Ansumana, R. 2020. Lockdown measures in response to COVID-19 in nine sub-Saharan

African countries. *BMJ Global Health* 5(10), <https://gh.bmj.com/content/5/10/e003319>

Heiberg, T. & Alexander, W. 2020. South Africa to impose 21-day lockdown as coronavirus cases jump. 23 Mar. 2020. <https://www.reuters.com/article/us-health-coronavirus-safrica-idUSKBN21A1SZ> Date of access: 12 Jun. 2022.

Huang, R., Tlili, A., Yang, J. & Chang, T.-W. 2020. *Handbook on facilitating flexible learning during educational disruption: the Chinese experience in maintaining uninterrupted learning in COVID-19 outbreak*. Beijing: Beijing: Smart Learning Institute of Beijing Normal University. Available from Ebook Central: https://www.researchgate.net/publication/339939064_Handbook_on_Facilitating_Flexible_Learning_During_Educational_Disruption_The_Chinese_Experience_in_Maintaining_Uninterrupted_Learning_in_COVID-19_Outbreak Date of access: 27 Aug. 2022.

IGI Global. 2022. *What is higher education institution*. <https://www.igi-global.com/dictionary/higher-education-institution/13096> Date of access: 18 May 2022.

Intermountain Healthcare. 2020. *What's the difference between a pandemic, an epidemic, endemic, and an outbreak?* <https://intermountainhealthcare.org/blogs/topics/live-well/2020/04/whats-the-difference-between-a-pandemic-an-epidemic-endemic-and-an-outbreak/> Date of access: 5 Sept. 2022.

Izumi, T., Sukhwani, V., Surjan, A. & Shaw, R. 2020. Managing and responding to pandemics in higher educational institutions: initial learning from COVID-19. *International Journal of Disaster Resilience in the Built Environment*:1-16. https://apru.org/wp-content/uploads/2021/12/10-1108_IJDRBE-06-2020-0054-1.pdf DOI 10.1108/IJDRBE-06-2020-0054

Jansen, D. & Warryn, K. 2020. *What (exactly) is research methodology?* <https://gradcoach.com/what-is-research-methodology/> Date of access: 3 Oct. 2022.

Jassat, W., Karim, S.S.A., Mudara, C., Welch, R., Ozougwu, L., Groome, M.J., ... Cheryl Cohen, C. 2022. Articles www.thelancet.com/lancetgh Vol 10 July 2022 e961

Clinical severity of COVID-19 in patients admitted to

hospital during the omicron wave in South Africa:

a retrospective observational study. *The Lancet Global Health* 2022, 10(7), 10: e961–69. [https://doi.org/10.1016/S2214-109X\(22\)00114-0](https://doi.org/10.1016/S2214-109X(22)00114-0)

Junnaid, M.H., Miralam, M.S. & Jeet, V. 2020. Leadership and organizational change management in unpredictable situations in responding to COVID-19 pandemic. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(16):1-12. DOI: 10.14456

Karalis, T. 2020. Planning and evaluation during educational disruption: lessons learned from Covid-19 pandemic for treatment of emergencies in education. *European Journal of Education Studies*, 7(4):125-142.
<https://www.researchgate.net/publication/341525564> Planning and evaluation during educational disruption lessons learned from COVID-19 pandemic for treatment of emergencies in education/link/5ec57cf7a6fdcc90d68915cb/download <http://dx.doi.org/10.5281/zenodo.3789022>10.5281

Khoza, S.B. 2020. Academics' "Why" of knowledge-building for the fourth industrial revolution and COVID-19 era. *International Journal of Higher Education* 9(6):1-12.
<https://doi.org/10.5430/ijhe.v9n6p247> doi:10.5430/ijhe.v9n6p247

Kilkki, K., Mäntylä, M., Karhu, K., Hämmäinen, H. & Ailisto, H. 2018. A disruption framework. *Science Direct* 129:275-284. <https://doi.org/10.1016/j.techfore.2017.09.034>

Krishnamurthy, S. 2020. The future of business education: a commentary in the shadow of the Covid-19 pandemic. *Journal of Business Research*, 117:1-5.
<https://doi.org/10.1016/j.jbusres.2020.05.034>

Kupriyanova, V., Estermann, T. & Sabic, N. 2018. *European higher education area: the impact of past and future policies*. Bucharest, Romania: Springer Available from Springer eBook Collection: <https://link.springer.com/content/pdf/10.1007/978-3-319-77407-7.pdf>.

Maree, K. 2016. First steps in research. In. 2nd ed. Pretoria: Van Schaik. p 192.

Mkhize, Z. 2020. *First case of Covid-19 Coronavirus reported in SA*. <https://www.nicd.ac.za/first-case-of-covid-19-coronavirus-reported-in-sa/> Date of access: 30 Sept. 2021.

Mncube, V., Mutongoza, B.H. & Olawale, E. 2021. Managing higher education institutions in the context of COVID-19 stringency: experiences of stakeholders at a rural South African university *KovsieJournals*

39(1):390-409. <https://journals.ufs.ac.za/index.php/pie/article/view/4606> Date of access: 2 October 2021. <https://doi.org/10.18820/2519593X/pie.v39.i1.24>

North-West University. 2022. *Student Academic Lifecycle Administration*. <http://services.nwu.ac.za/sala> Date of access: 5 May 2022.

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017. Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1):1609406917733847. <https://doi.org/10.1177/1609406917733847>
10.1177/1609406917733847

NYU Libraries. 2021. *Qualitative data analysis: ATLAS.ti*. <https://guides.nyu.edu/QDA> Date of access: 2 Oct. 2021.

Oxford Vaccine Group. 2019. *What is a vaccine, and how do vaccines work?* <https://vk.ovg.ox.ac.uk/vk/how-do-vaccines-work> Date of access: 31 Aug. 2022.

Paulus, T.M. 2018. Atlas.ti. In: Frey, B.B., ed. *The SAGE Encyclopedia of Educational Research, Measurement, and Evaluation*. Thousand Oaks, California: SAGE Publications, Inc. pp. 130-132. Available from:

<https://methods.sagepub.com/reference/the-sage-encyclopedia-of-educational-research-measurement-and-evaluation/i3077.xml>. 10.4135/9781506326139

Pham, H.H. & Ho, T.T.H. 2020. Toward a 'new normal' with e-learning in Vietnamese higher education during the post COVID-19 pandemic. *Higher Education Research & Development*, 39(7):1327-1331. <https://doi.org/10.1080/07294360.2020.1823945>
10.1080/07294360.2020.1823945

Question Pro. 2022. *Research design: what it is, elements & types*.

<https://www.questionpro.com/blog/research-design/> Date of access: 3 Oct. 2022.

Rees, V. 2020. *Lopinavir-ritonavir not an effective treatment for COVID-19*.

<https://www.europeanpharmaceuticalreview.com/news/129758/lopinavir-ritonavir-not-an-effective-treatment-for-covid-19-study-shows/> Date of access: 28 Aug. 2022.

Seres, L., Maric, M., Tumbas, P. & Pavlicevic, V. 2019. University stakeholder mapping. In. *Conference proceedings*. 12th International Conference of Education, Research and Innovation (ICERI 2019), Seville. IATED Academy. pp. 9054-9062.

Shahzad, A., Hassan, R., Aremu, A.Y., Hussain, A. & Lodhi, R.N. 2021. Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female. *Quality & Quantity*, 55(3):805-826.

<https://doi.org/10.1007/s11135-020-01028-z> 10.1007/s11135-020-01028-z

South African Government. 2021. *COVID-19 Coronavirus vaccine*.

<https://www.gov.za/covid-19/vaccine/vaccine> Date of access: 31 Aug. 2022.

Ültanır, E. 2012. An epistemological glance at the constructivist approach: constructivist learning in Dewey, Piaget, Montessori. *International Journal of Instruction* 5(2):1-18.

Van Heerden, J. & Roos, E.L. 2020. The possible effects of the extended lockdown period on the South African Economy: a CGE analysis *South African Journal of Economics* 89(1):95-111. <https://onlinelibrary.wiley.com/doi/full/10.1111/saje.12273>
<https://doi.org/10.1111/saje.12273>

Velaction. 2022. *Administrative processes*. <https://www.velaction.com/administrative-processes/> Date of access: 10 May 2022.

World Economic Forum. 2020. *5 ways COVID-19 has changed workforce management*. <https://www.weforum.org/agenda/2020/06/covid-homeworking-symptom-of-changing-face-of-workforce-management/> Date of access: 29 Aug. 2022.

World Health Organization. 2021. *Coronavirus disease (COVID-19)*. https://www.who.int/health-topics/coronavirus#tab=tab_1 Date of access: 12 June 2022.

Yee, C.P. 2020. *Covid-19: impact on the tertiary education sector in Malaysia*. <https://penanginstitute.org/publications/covid-19-crisis-assessments/covid-19-impact-on-the-tertiary-education-sector-in-malaysia/> Date of access: 1 Oct. 2021.

Zhang, Y., Liang, R., Shi, Z. & Ma, H. 2012. The design and implementation of a process-driven higher educational administrative system. *IERI Procedia*, 2:176-182. https://www.sciencedirect.com/science/article/pii/S2212667812000792?ref=cra_js_challenge&fr=RR-1 <https://doi.org/10.1016/j.ieri.2012.06.071>

ANNEXURES

Annexure 1: Ethic Clearance Form

Annexure 2: Informed Consent

ANNEXURE 1



NORTH-WEST UNIVERSITY
YUNIBESITHI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Web: <http://www.nwu.ac.za>

Economic and Management Sciences Research
Ethics Committee (EMS-REC)

31 January 2022

Dr J Jordaan
Per e-mail
Dear Dr Jordaan,

EMS-REC FEEDBACK: 28012022
Student: Turkstra, S (21630399)(NWU-00991-21-A4)
Study leader: Dr J Jordaan - MBA

Your ethics application on, *Exploring the disruption of Covid 19 on stakeholders utilising administrative processes at a Higher Education Institution*, which served on the EMSREC meeting of 28 January 2022, refers.

Outcome:

Approved as a minimal risk study. A number **NWU-00991-21-A4** is given for one year of ethics clearance.

Please note that the ethics approval of this application is subject to the Covid-19 protocols.

Kind regards,

Mark
Rathbone

Digitally signed by Mark Rathbone
DN: cn=Mark Rathbone, o=North-
West University, ou=Business
management,
email=mark.rathbone@nwu.ac.za,
c=ZA
Date: 2022.02.01 08:53:43 +02'00'

Prof Mark Rathbone
Chairperson: Economic and Management Sciences Research Ethics Committee
(EMS-REC)

ANNEXURE 2

Interview Protocol and Informed consent:

Exploring the disruption of Covid 19 on stakeholders utilising administrative processes at a Higher Education Institution

Personal or Zoom/Teams online session interview guide (20 minutes):

First, read to the participant: This interview is part of my MBA studies. Your participation is entirely voluntary and if you choose to participate, it will be appreciated. If you feel uncomfortable answering any question, you are free not to answer without any negative consequences to you. You may also stop the interview at any stage if you want to, without any negative consequences to you. The raw data collected will be stored in electronic format for reference purposes and will be destroyed after three years. You can get access to the results of the study from the NWU library after completion. There is no direct benefit to you from taking part in the study. You are welcome to ask for clarification about any questions. Your identity will be kept anonymous in the study and you will only be referred to by a number. Confidentiality of your inputs is guaranteed. I would like to record the interview for the sake of accurately transcribing the discussion.

Do you permit me to record the interview? By continuing with this interview, you give consent that the information you share may be used for this study and that I may record the interview

Question number	Interview questions
Question 1	In which way are you connected to the HEI (student, parent, academic, administrative personnel)?
Question 2	How long have you already been involved with the HEI?
Question 3	Which administrative process are you involved in? (application, registration, lectures, marketing, examination, marks processing, lecturing, etc)?
Question 4	Please tell me in how you have experienced the administrative processes before the Covid 19 lockdown? (prompt: error-free, fast, efficient, etc.)
Question 5	Please tell me in how you have experienced the administrative processes during and after the Covid 19 lockdown?
Question 6	Which administrative processes do you think have improved and which have deteriorated? Please explain why you say so.
Question 7	If you can change something regarding the administration, what would it be?
Question 8	What recommendations would you suggest to improve the administrative processes for quality assurance? Please explain why you say so.