NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

STRATEGIC PLAN
2019 - 2023

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ACRONYMS

ARIPO	-	African Regional Intellectual Property Organisation
EMA	-	Environmental Management Agency
HPC	-	High Performance Computer
HR	-	Human Resources
IBD	-	Innovation and Business Development
ICT	-	Information and Communication Technology
ICTS	-	Information and Communication Technology Services
IP	-	Intellectual Property
ISO	-	International Standards Organisation
JVC	-	Joint Venture Capital
KPI	-	Key Performance Indicator
MG	-	Ministry Goals
MHTESTD	-	Ministry of Higher and Tertiary Education, Science and Technology Development
MOU	-	Memorandum of Understanding
NUST	-	National University of Science and Technology
NUSTPRESS	-	National University of Science and Technology Press
PESTLEE	-	Political, Economic, Social, Technology, Legal, Environment, Ethical
PhD	-	Doctor of Philosophy
PPP	-	Public Private Partnerships
PVC	-	Pro Vice-Chancellor
SBU	-	Strategic Business Unit
SDG	-	Sustainable Development Goal
STEM	-	Science, Technology, Engineering and Mathematics
TSP	-	Transitional Stabilisation Programme
VC	-	Vice-Chancellor
WIPO	-	World Intellectual Property Organisation
ZIMCHE	-	Zimbabwe Council for Higher Education
ZIMDEF	-	Zimbabwe Development Fund
ZIPO	-	Zimbabwe Intellectual Property Organisation

2019 Council Members

STATEMENT BY THE CHAIRMAN OF COUNCIL

It is my pleasure to present the Strategic Plan 2019-2023 of the National University of Science and Technology (NUST), which is the foundation for living our vision, mission and values as spelt out in this document. Our value statements are very important to us as an institution. We fully understand that we must live these values to realise our vision and future.

The NUST Strategic Plan is based on five key Strategic Directions (Key Result Areas), namely: **Infrastructure Development; Business Development; Technology, Innovation and Intellectual Property; Research, Teaching and Learning and Community Scholarly Engagement and Organisational Effectiveness.** These five Strategic Directions will support our ambition and they will be supported by specific Goals, Strategic Objectives and Strategic Actions. The Strategic Goals and Objectives set out in the Plan are underpinned by national policy initiatives and the parent Ministry's Strategic Plan 2019-2023.

The NUST Strategic Plan 2019-2023 plots a new trajectory for the University in securing and advancing the University's position within the higher and tertiary education landscape in Zimbabwe. In crafting this plan, we have reflected on the achievements and challenges of the past as we now look forward to a brighter future.

The crafting of this Plan has been an all-inclusive team process involving all levels of employees, students and Council. As such, the NUST Council will ensure that the University is managed in a sound manner that fosters efficient and effective academic and management accountability within an environment characterised by good corporate governance. The Council will supervise the business and affairs of the University to foster long-term success and to maximize shareholder value in a manner that recognises the interests of all stakeholders identified in the Plan's Stakeholder Analysis.

Finally, I would like to extend my profound and warm gratitude to the government, our parent Ministry, my colleagues in the NUST Council, the University management, staff and students, stakeholders and partners, employers and the wider community for their valuable contributions to the University in the past and in the future. May the spirit of teamwork and cooperation continue as the University embarks on its transformational path as set out in this Strategic Plan.

Thank you

Signed... Date...

Amb. Zenzo W. Nsimbi
Chairman

Mrs. Nomathemba Ndlovu
Vice-Chairperson

Rev. Dr. Jefferety Sibanda
Mr. Israel Ndlovu
Ms. Sithembinkosi Nyathi
Mrs. Kezinet Ndhlovu
Mr. Japhet G. Ndabeni-Ncube
Mr. Obert Z. Sibanda
Mrs. Elizabeth Chikwanda
Mr. Job Sibanda
Mr. Casper Ronney
Mrs. Mildred Mkandla
Mr. Stephen Nyambuya
Rev. Dr. Rudo Lois Moyo
Mr. Godfrey Zarura Manyonganise
Eng. Simela Dube
Eng. Josephine Makuvara
Eng. Gratitude Charis
Mr. Chrispen Mugova
Eng. Todd Garfield Nkiwane
Ms. Fiona Gandiwa Magaya
Ms. Bridget Chipungu
Eng. Edwin Gwaze
Dr. Mbongeni Ndlovu
Mr. Alois Muzuwe

2019 Principal Officers

STATEMENT BY THE VICE-CHANCELLOR

The NUST Strategic Plan 2019-2023 is set within the larger national framework, Vision 2030, which seeks to transform Zimbabwe into an upper middle-income economy by 2030. Through this Plan, NUST would like to transform the way its family thinks and works towards the University being recognised as an institution of choice in academic research, teaching, learning, innovation, business development and industrialisation of Zimbabwe.

In the next five years, NUST will pursue a growth strategy focusing on the following five Strategic Directions:

•   **Infrastructure Development;**
•   **Business Development;**
•   **Technology, Innovation and Intellectual Property;**
•   **Research, Teaching and Learning and Community Scholarly engagement; and**
•   **Organisational Effectiveness.**

The University will further embark on the journey towards becoming a thriving university city.

The Plan will be disseminated to every member of the NUST community. Every member of staff shall be familiar with the contents of this Plan, especially those targets that pertain to their line of work, for effective implementation.

I would like to acknowledge the contributions made by our parent Ministry, University Council, management, staff, and students.

Signed.. Date...

Prof. Eng. Mqhele Dlodlo
Vice-Chancellor

Dr. Gatsha Mazithulela
Pro-Vice Chancellor - IBD

Dr. Nduduzo Phuthi
Acting Pro-Vice Chancellor - ARC

Mr. Fidelis Mhlanga
Registrar

Dr. Fortune S. Nkomo
Bursar

Ms. Katherine Matsika
Librarian

1.0 INTRODUCTION

This document sets out the Strategic Plan for the National University of Science and Technology (NUST) for the period 2019-2023. In developing the document, the University took into cognisance changes in the general environment and the current state of Higher Education as stipulated in the Ministry of Higher and Tertiary Education, Science and Technology Development's (MHTESTD) Strategic Plan, 2019-2023. The Ministry's plan clearly shows the shift from Education 3.0, which emphasised teaching, research and community engagement, to Education 5.0, which now also emphasizes innovation and industrialisation.

The Strategic Plan defines 'who we are, where we are going, how we hope to get there and how we will know when we are there,' in line with the Ministry's Strategic Plan. It has been developed against the backdrop of government initiatives, such as the Transitional Stabilization Programme (TSP), the Sustainable Development Goals (SDGs) and Education 5.0. These initiatives will provide significant opportunities to be exploited and challenges to be addressed by NUST.

The Plan outlines five Key Strategic Directions that NUST will concentrate on in the next five years, namely:

1. **Infrastructure Development,**
2. **Business Development,**
3. **Innovation and Intellectual Property,**
4. **Research, Teaching and Learning, and Community Scholarly Engagement and**
5. **Organisational Effectiveness.**

These five directions are derived from the aspirations of the Ministry, Sustainable Development Goals and National Skills Imperatives as encapsulated in the results of the 2018 National Skills Audit. Like all Strategic Plans, this document also specifies the University's strategic goals, objectives, responsibilities, resources, key performance indicators and time frames within which results must be achieved.

For the purposes of monitoring and evaluation, the Operational Plans of this Strategic Plan shall be reviewed quarterly, and the Strategy itself, annually. The Plan covers the following sections:

(i) **The context provides the overview of the external and internal environments within which NUST operates,**
(ii) **The approach used in developing the Strategic Plan,**
(iii) **The Vision, Mission and Value Statements,**
(iv) **The Key Strategic Directions, Goals and Objectives (with tables for each) outlining the strategies, targets (timelines) and resources, and**
(v) **The Monitoring and Evaluation Plan.**

This Strategic Plan will guide and focus the attention and efforts of all stakeholders towards the realisation of the NUST mandate, which is to develop human capital with a bias towards Science, Technology, Engineering and Mathematics disciplines.

The Strategic Plan was developed through a series of workshops that involved Councillors, Senior Managers, Heads of Departments as well as different Departmental representatives. Facilitated by members of the University community and an external consultant, the aim of the workshops was to foster a complete understanding of the envisaged University plan that is aligned to the Ministry's own Strategic Plan 2019-2023 for the modernisation and industrialisation of Zimbabwe through relevant education that is able to provide goods and services. The participants at these workshops were also expected to cascade the planning process to the lowest levels of the University community, thus facilitating an across-the-board buy-in for effective implementation.

2.0 VISION, MISSION AND VALUE STATEMENTS

This section was developed with hindsight of the Vision, Mission and Value Statements of the MHTESTD as well as the University mandate. Contributing to 'a heritage-based Higher and Tertiary Education, Science and Technology Development for a competitive industrialised and modernised Zimbabwe by 2030', the University will be guided by the following Vision, Mission, Value Statements and Motto.

2.1 VISION

To be a world class University in science, technology, innovation, entrepreneurship and business development, spearheading industrialisation locally and beyond.

2.2 MISSION

To lead in human capital development for industrial and socio-economic transformation, with a bias towards science, technology, engineering and mathematics (STEM) based solutions.

2.3 VALUE STATEMENTS

2.3.1 In the delivery of value to our clients, we pursue academic excellence with integrity, honesty and ethical behaviour.
2.3.2 We are committed to responsible research and innovation that drives commercialisation and industrialisation.

2.3.3 We thrive on mutual respect, teamwork and effective partnerships.
2.3.4 We are driven by a passion to fulfil your dream.

2.4 MOTTO
Think in Other Terms

3.0 ENVIRONMENTAL/EXTERNAL ANALYSIS (PESTLEE)
There is a mismatch in higher education in Zimbabwe, characterised by high literacy levels (96%) and very low skills levels (38%), with business and commerce exhibiting a skills surplus of 121%. As a University, NUST is challenged to contribute towards a reduction in the 58% gap between the literacy and skills levels. In addition, Zimbabwean universities are characterised by low international rankings and NUST, through this Strategic Plan, seeks to improve its ranking.

An analysis of the macro environmental forces that could impact on NUST's strategic initiatives and operational plans was undertaken using Political, Economic, Social, Technological, Legal, Environmental and Ethical (PESTLEE)factors. There was a thorough assessment of the country's macro-economic, socio-cultural, political, technological, legal, ethical and environmental factors and their effect on NUST now and in the foreseeable future. These factors will affect the University's attempt to develop and deliver a knowledgeable and skilled human capital base for the production of quality goods and services as outlined in the Mission of the parent Ministry. A summary of the PESTLEE analysis is presented in Table 1.

Table 1: PESTLEE Analysis

Environmental Factor	Opp./Threat	Impact	Time Period		
	O/T	H/M/L	Short	Medium	Long
Political					
Perceived political climate(political polarisation, poor political image internationally)	T	H	✓		
Inconsistent and unpredictable policies	T	H	✓		
Devolution of power to promote investment	O	M			✓
Willingness by the Government to engage with the international community	O	H			✓
Accessibility of government officials	O	H	✓		
Corruption	T	H	✓		
Sanctions	T	H	✓		
Economic Factors					
Economic instability	T	H	✓		
Multi-currency system	O	H	✓		
Three-tier pricing system	T	H	✓		
Foreign currency shortages	T	H	✓		
Local commodity shortages	T	H	✓		
High interest rates	T	H	✓		
Increasing inflation	T	H	✓		
Reduction in disposable incomes	T	H	✓		
High economic speculation (arbitrage)	T	H	✓		
Simplified PPP/JVC arrangements	O	M			✓

Lack of funding for research and development	T	H	✓		
Unreliable power supplies	T	H	✓		
Donor fatigue	T	H	✓		
Constrained fiscal space	T	H	✓		
Lack of autonomy to set fees and salaries	T	H	✓		
Socio-cultural Factors					
High rate of unemployment and underemployment	T	H	✓		
Interest from alumni	O	H	✓		
Massification of Education	T	H	✓		
Unavailability of critical skills (brain drain)	T	H	✓		
High demand for tertiary education	O	H	✓		
High competition among universities	T	H	✓		
Substance abuse	T	H	✓		
High stress levels	T	H	✓		
Poor culture of philanthropy	T	H	✓		
Technological Factors					
Technological obsolescence	T	H	✓		
Availability of ICT and other Technologies (e.g. HPC)	O	H	✓		
High rate of technological changes	O	H	✓		
Unreliable internet connectivity	T	H	✓		
Expensive software	T	H	✓		
Off-patent manufacturing	O	H	✓		
Legal					
National ICT Policy	T	H	✓		
Compliance risks to statutory requirements (e.g.Procurement and Disposal of Public Assets Act[Chapter 22:23])	T	H	✓		
Constitution of Zimbabwe Amendment (No 20) Act, 2013	O	H	✓		
ZIMCHE Act [Chapter: 25:27]	O	H	✓		
NUST Act, 1990	O	H	✓		
Zimbabwe National Code on Corporate Governance	O	H	✓		
Patent Act, [Chapter 26:03]	O	H	✓		
Labour Act [Chapter 28]	O	H	✓		
Public Finance Management Act [Chapter 22:19]	T	H	✓		
Environmental Management Act [Chapter 20:27]	T	H	✓		
Local Authority By-laws	O	M	✓		
State Owned Enterprises Heads Tenure limits	O	M	✓		

Environmental						
EMA Requirements		O	H	✓		
Climate Change		T	M	✓		
Ethical						
Corruption		T	H	✓		

Each factor in Table 1 is analysed in terms of whether it is an opportunity or a threat to NUST and its impact on the University is rated as high, medium or low. A consideration is also made on whether the factor is in the short, medium or long-term plan. The majority of the factors identified were threats rated in the high category, indicating that the macro-environment provides strong challenges for NUST. In this regard, the University will contribute towards ensuring an affordable, competitive and accessible education: thereby helping raise employment levels and reducing poverty.

4.0 STAKEHOLDER ANALYSIS

The planning process included a stakeholder analysis to identify key stakeholders that are of importance to NUST and the impact that these stakeholders have on the University's ability to achieve its vision, mission and objectives. The analysis looked at the needs of the stakeholders as compared to the needs of the University, the ability of the stakeholders to block the University's efforts and the level of power held by each stakeholder. Table 2 shows the results of the stakeholder analysis.

Table 2: Stakeholder Analysis

Stakeholder	Their Expectations	Level of Interest (High/Low)	NUST Needs	Ability/Power to block NUST efforts (High/Low)
External				
1. MHTESTD	1. Adherence to mandate in line with Education 5.0 2. Graduates with entrepreneurial skills using a heritage-based philosophy for the production of quality goods and services 3. Accountability from the University 4. Timely information	H	Speedy response and approvals Exposure to opportunities for international collaborations Facilitation of intercessions with other Ministries and government departments Assistance with recruitment of foreign students Assistance with establishment of science parks/innovation hubs Provision of infrastructure to nurture the transformation of knowledge generated Resources for research and development	H
2. Scholarship providers	1. Quality graduates 2. Accountability	L	1. Provision of scholarships to NUST students 2. Timely disbursements of scholarships	H
3. Financiers / Partners	1. Accountability 2. Transparency and integrity	H	1. Affordable funding	H

Stakeholder	Their Expectations	Level of Interest (High/Low)	NUST Needs	Ability/Power to block NUST efforts (High/Low)
4. Industry &commerce	1. Competent, accountable and ethical graduates 2. Innovative and entrepreneurial graduates 3. A pipeline of investment prospects linked to innovation activities at NUST 4. Problem solving and technology leadership from NUST	H	1. Internship opportunities for students and staff 2. Up-to-date technological facilities 3. Provision of research opportunities 4. Industrial advisory services (industrial boards and curriculum reviews)	H
5. Local authorities	1. Competent, accountable and ethical graduates 2. Innovative and entrepreneurial graduates 3. Timely settlements for services provided 4. Collaborations in research and development and consultancy services	H	1. Efficient services 2. Internship opportunities for students and staff 3. Opportunities for research and consultancy 4. Land for expansion	H
6. Parents/ Guardians	1. Professional academic and administrative staff 2. Requisitely skilled graduates 3. Community engagement with the University 4. Fulfilment of the *loco parentis* role	H	1. Timely settlement of fees and levies 2. Cooperation with the University on community engagement and student disciplinary issues 3. Philanthropy and a culture of giving	H
7. Other Universities	1. Collaboration and networking 2. Fair competition	H	1. Collaboration and networking 2. Fair competition	L
Affiliate and Associate colleges	1. Assistance with expert knowledge 2. Recognition 3. Capacity building	L	1. Timely payment of affiliation fees	H
Other Ministries, parastatals and government departments	1. Expertise and professionalism 2. Cooperation 3. Research outputs	L	1. Cooperation in research and consultancy 2. Direct funding for areas linked to the line Ministry's work	H
10. Media	1. Timely and accurate information 2. Access to appropriate University personnel	H	1. Fair and balanced reporting 2. Dialogue through Communication and Marketing Office	H

Stakeholder	Their Expectations	Level of Interest (High/Low)	NUST Needs	Ability/Power to block NUST efforts (High/Low)
11. Suppliers	1. Business	H	1. Quality Service 2. Reliability	H
12. Regulators	1. Compliance	H	1. Guidance 2. Fair Treatment	H
Internal				
	1. Quality service delivery 2. Professional and dedicated lecturers and support staff 3. Efficient systems 4. Fair treatment by staff 5. Value for money 6. Good, catering, transport and accommodation	H	1. Commitment and honesty to academic work 2. Ethical and moral uprightness 3. Timely payment of fees and fulfilment of registration requirements 4. Knowledge of appropriate University systems, policies and statutes	H
	1. Competitive remuneration 2. Attractive conditions of service 3. Conducive work environment 4. Availability of resources 5. Fair treatment	H	1. Professionalism 2. Good attitude and a good work ethic 3. Ethical behaviour 4. Knowledge of appropriate University systems, policies and statutes	H
3. University Council	1. Quality and professional service delivery 2. Adherence to mandate 3. Enhanced visibility of the University 4. Accountability	H	1. Prompt response to recommendations from Committees and Boards 2. Dedicated University Councillors 3. Enhanced visibility of the University	H
4. University Senate	1. Adherence to policies 2. Effective communication 3. Academic excellence 4. Consistency of operations 5. Accountability 6. Professionalism	H	1. Timely decisions on issues raised by staff 2. Professionalism 3. Accountability 4. Maintenance of academic standards 5. Effective communication 6. Adherence to policies	H
5. Staff Unions	1. Effective communication 2. Good conditions of service 3. Adherence to Acts and statutes 4. Commitment to positive engagement	H	1. Commitment to positive engagement 2. Effective communication 3. Good labour relations	H

5.0 INTERNAL ANALYSIS

An internal analysis aims to identify internal strategic factors which are commonly referred to as organisational strengths and weaknesses by assessing the internal engines driving the University. The McKinsey 7-S Framework and the resource appraisal techniques can be combined to form the basis of the analysis. Figure 1 illustrates the McKinsey Framework and the elements that form the basis for an internal analysis of the University.
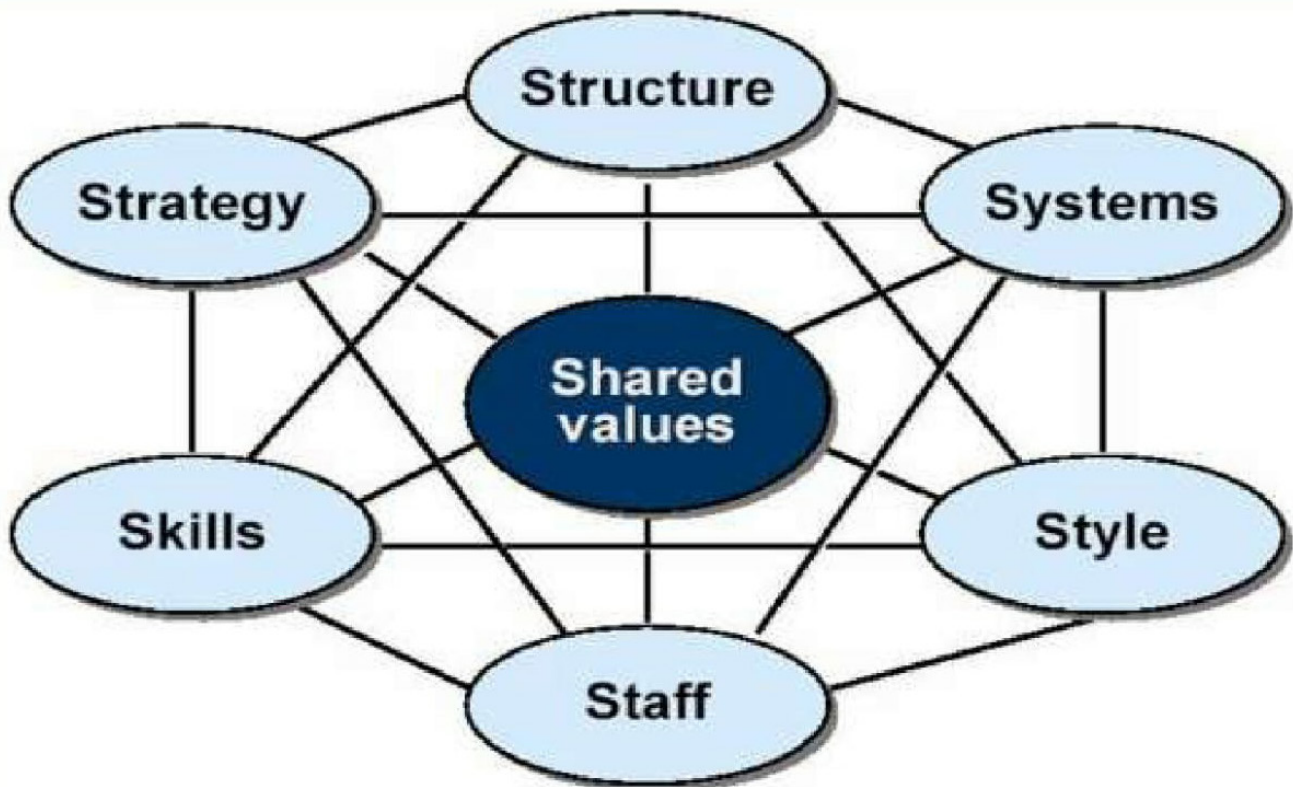

Figure 1: McKinsey 7-S Framework: Source: McKinsey Quarterly, 2008

Using the above framework as the basis of the University's internal analysis, a number of issues and possible actions were identified as shown in Table 3.

Table 3: NUST Internal Analysis Summary

Focus Area	Issues	Possible Actions
1. Structure	1. Structure recently reconfigured to reflect responsibilities of the 2 PVCs 2. A structure with portfolios that have been modified in the global setting 3. Current structure impedes communication and decision making	1. Develop an effective structure
2. Systems	1. Concerns that a number of systems in the University don't work as well as they should. 2. Lack of accessible and up-to-date policies of the University 3. Committee and Board system tends to be bureaucratic and this slows down decision-making 4. Existing systems not user-friendly	1. Identify all University systems, processes and procedures where corrective measures need to be taken 2. Undertake a University-wide policy review, development and approval programme

Focus Area	Issues	Possible Actions
3. Shared values	1. There currently exists a disparity between the attitudes and behaviour of University employees and the set-down values 2. An inappropriate work ethic that may not be in sync with the envisaged strategic plan.	1. Display NUST's new Vision, Mission and Value Statements in every office and work space. 2. Conduct across-the-board training on attitudes and professionalism in the workplace. 3. Conduct across-the-board training on the importance of an appropriate work ethic. 4. Train on acceptable norms and standards in the University 5. Finalise, register and publicise code of conduct 6. Train staff on and enforce code of conduct
4. Leadership Style	1. Need to identify leadership styles at various levels of NUST 2. Need to identify management styles at NUST 3. Judging by the problems that have arisen there are concerns about leadership at the University 4. Identify leadership skills gaps in the University	1. Assess if current leadership and management styles are capable of driving the new strategy 2. Align current leadership and management styles with the strategic plan 3. Assess the extent of teamwork and collaboration at all levels of NUST
5. Staff and Skills	1. The University does not have enough employees in key positions. 2. Misalignment between employee competencies and the University strategy. 3. Lack of employee understanding of job descriptions. 4. Out-dated recruitment policy and inadequately funded training and development programme. 5. Lack of skills audit and staff performance evaluation programme. 6. Staff needs soft skills improvement (timekeeping, communication, team working, self-motivation, report writing)	1. Conduct a staff and skills audit to find gaps (e.g., legal expertise) 2. Conduct an annual training needs analysis and follow up with training programmes 3. Measure employee performance regularly. 4. Adequately fund the Staff Development Vote

6.0 SWOT ANALYSIS

The internal and external analyses conducted above culminated in a SWOT analysis. SWOT is an acronym that stands for Strengths and Weaknesses (as internal strategic factors) and Opportunities and Threats (as external strategic factors). The SWOT analysis was undertaken not only to identify NUST's distinctive competencies, the particular capabilities and resources it possesses, and the superior way in which they are used, but also to identify opportunities that the University is not currently able to take advantage of due to the prevailing macroeconomic conditions. The results of the SWOT Analysis are shown in Table 4 where each SWOT factor is rated in terms of its importance or impact as *major, moderate* or *minor.*

Table 4: Summary of NUST SWOT analysis

STRENGTHS	MAJOR	MODERATE	MINOR
Management commitment		✓	
Flat organisational structure	✓		
Open lines of communication not properly utilised	✓		
Readily accessible Vice-Chancellor and Pro Vice-Chancellors	✓		
Availability of land	✓		
Available expertise within Faculties		✓	
Availability of underground water	✓		
Operational SBUs e.g., NUSTPRESS		✓	
NUST brand	✓		
Establishment of innovation hubs	✓		
Office dedicated to innovation and business development	✓		
WEAKNESSES	MAJOR	MODERATE	MINOR
Infrastructure (teaching space, laboratories, workshops, ICT, water reticulation)	✓		
Funding	✓		
Revenue collection	✓		
ICTS system	✓		
Organisational culture	✓		
Internal communication system	✓		
Bureaucratic procurement procedures	✓		
Team spirit		✓	
Service delivery	✓		
Enforcement of the code of conduct	✓		
Time management	✓		
Failure to meet deadlines	✓		
Collegiality	✓		
Work ethic	✓		
Unionism	✓		
Collaboration and synergies among Faculties		✓	
Supervision of staff	✓		
Performance management systems	✓		
Lack of a positive research culture	✓		
Inability to translate research into viable products and projects	✓		
Training and development			✓
Utilisation of internally available skills to solve institutional problems		✓	
Monitoring and evaluation	✓		
Mentorship by Professors	✓		
Staffing	✓		
Industrially experienced staff	✓		
Staff handbook	✓		
Yearbook	✓		
Job evaluation	✓		
Application of University policies	✓		
Transport and catering facilities	✓		
OPPORTUNITIES	MAJOR	MODERATE	MINOR
Research grants from external stakeholders		✓	
Proposed devolution of power to promote investment	✓		
Accessibility of government officials		✓	
Willingness by the government to engage with the international community	✓		

	MAJOR	MODERATE	MINOR
Monetary policy emphasising infrastructure development	✓		
Goodwill from Bulawayo City Council and other organisations	✓		
Possibilities of generation of renewable energy	✓		
Possibilities of income generation	✓		
Possibilities of downstream services	✓		
Room for growth into a university city	✓		
Enabling policies for PPPs and JVCs	✓		
Increasing demand for higher education	✓		
Possibilities offered by e-learning	✓		
Alumni holding strategic positions in industry and commerce	✓		
Proposed NUST solar plant	✓		
Increased enrolment of international students	✓		
THREATS	**MAJOR**	**MODERATE**	**MINOR**
Unpredictable and inconsistent government policies	✓		
Corruption	✓		
Unclear land tenure	✓		
High taxes and import duties	✓		
Liquidity challenges	✓		
Investment climate	✓		
High unemployment	✓		
Brain drain	✓		
Substance abuse	✓		
Lack of sufficient autonomy	✓		
Financial challenges of the population	✓		
Climate change	✓		
Sanctions	✓		
Economic instability and speculation (arbitrage)	✓		
Multi-tier pricing system	✓		
Foreign currency shortages	✓		
Local commodity shortages	✓		
High interest rates	✓		
Increasing inflation	✓		
Unreliable power and water supplies	✓		
Unaffordable software	✓		
Donor fatigue			✓
Massification of education			✓
High competition among universities			✓
High population stress levels	✓		
Obsolescent technological infrastructure	✓		
Internship opportunities (students and lecturers)		✓	
Duplication of NUST programmes by competitors		✓	

7.0 GROWTH STRATEGIES

In weighing the strategic options available, the University decided to adopt a growth strategy driven by the Ansoff's Product Matrix Expansion Grid as well as the Blue Ocean approach. This growth will involve an increase in the students' population through the identification of new markets and development of new programmes in the Faculties, from the current 10706 to 21000 by 2023. New business development projects will also be established through diversification. Through the Ansoff's matrix and the Blue Ocean strategy approach, the University identified areas that needed to be streamlined and improved on as indicated in Tables 5 and 6.

7.1 Current market and products

The University currently draws 99% of its students from Zimbabwe, with the remainder coming from the rest of the continent. Within Zimbabwe the University is currently focusing on the cities of Bulawayo and Harare. The current mode of delivery for most post-graduate programmes is evening, fulltime and block release. At present the University offers a wide range of undergraduate and postgraduate programmes across its seven faculties as shown in **Appendix 1**. As part of its growth strategy the University will introduce additional programmes.Presently the University is receiving applications in the region of 6000, yet capacity is limited to admission of only 2000 new students per year.

Table 5: The NUST Growth Matrix

Market Penetration	Market Development
✓ Increase the footprint of NUSTSEC ✓ Set up satellite campuses locally ✓ Tailor made programmes, e.g. training records managers ✓ Lower entry points ✓ Increase the number of publications in peer reviewed journals ✓ Increase the level of consultancies ✓ Increase collaboration in research, etc.	✓ Provide training to new customers, e.g. the elderly, caregivers, farmers, local government ✓ Offer ICT skills and competencies upgrades ✓ Promote online delivery ✓ Explore open learning ✓ Facilitate open research ✓ Facilitate multi-disciplinary research ✓ Internationalisation
Product Development	**Diversification**
✓ Set up new programmes including professional development courses ✓ Introduce new faculties and schools ✓ Re-brand programmes ✓ Offer majors and minors ✓ Incubate spin-offs and start-up companies ✓ Establish science and technology parks ✓ Establish factory shells	✓ Engage in energy production e.g. Solar farm ✓ Introduce public transport services ✓ Set up consulting services ✓ Venture into construction ✓ Provide catering services to students and staff ✓ Provide commercial accommodation ✓ Set up a Fuel station ✓ Hire out NUST infrastructure ✓ Increase the branded merchandise

Table 6: The NUST Growth and Differentiation Strategies Using the Blue Ocean Approach

Eliminate	Raise
✓ Bureaucracy: unnecessary processes e.g. on procurement ✓ Compartmentalisation/silos ✓ Bad debt ✓ Bad work ethics ✓ Invention disclosure before IP protection	✓ The use of e-learning platforms ✓ Profile of the NUST brand ✓ Staff and student morale ✓ Level of internationalisation ✓ Inter-departmental collaboration in research ✓ Intellectual property awareness ✓ Institutional intellectual property advisory services ✓ Functionality of the ICT systems ✓ Overall quality management systems
Reduce	**Create**
✓ Over-teaching ✓ Number of modules per programme ✓ Number of committees ✓ Research without connectedness ✓ The length of admission and registration processes	✓ Programmes in line with community needs ✓ Output from research e.g. research-based solutions ✓ Collaboration with communities and industry ✓ An enabling environment for innovation ✓ An efficient procurement management unit ✓ An electronic document management system ✓ A post-doctoral research programme ✓ An organisational structure that addresses the new strategic plan

8.0 THE FIVE KEY STRATEGIC DIRECTIONS

The University's Strategic Directions were formulated in light of the prevailing socio-economic and political environment, the SWOT analysis and the Ministry's strategic goals. The five strategic directions are: infrastructure development; business development; innovation and intellectual property; research, teaching and learning and community scholarly engagement support as well as organisational effectiveness. Each of the Strategic Directions will be accompanied by a number of strategic initiatives that will be developed at Faculty and Departmental level.

The Ministry's 5 strategic goals are (MG1) - a higher education system that provides goods and services; (MG2) - strong educational programmes supported by modern physical and financial infrastructure; (MG3) - heritage-based higher and tertiary education science and technology development, that provides quality goods and services; (MG4) industrialised economy that provides quality goods and services and (MG5) robust governance structures for the modernisation and industrialisation of Zimbabwe. These are captured in each of NUST's five Strategic Directions as shown in Table 7.

Table 7: Strategic Directions, Key enablers and Performance indicators

Strategic Direction	Key Enablers	Key Performance Indicators (KPI's)
1.0 Infrastructure Development (MG2)		
1.1 Lecture theatres, laboratories, studios, learning resource centre, workshops, senior common room, chapel, sports facilities 1.2 Roads, ICT facilities, water reticulation system, paving of the central plaza 1.3 Innovation hubs, factory shells 1.4 Student housing 1.5 Staff housing and Suburban City Planning	• JVCs, PPPs, Third Stream Income • Land • Existing infrastructure • Existing drawings and plans • Ministry doctrine • National TSP (funding) • ZIMDEF • Alumni • Legislation e.g., NUST Act, Procurement and Disposal of Public Assets Act • Ministry of Finance and Economic Development • Financial institutions • Political will • Skills and personnel • Technology e.g., equipment • NUST – staff housing support schemes • Accessibility by people living with a disability	• Number of operational PPPs • Active construction sites • Increase in complete buildings - *student residences, staff houses, laboratories, lecture theatres, etc* • Higher research output • Increase in teaching and office space • Attraction of international students • Lecture facilities - theatres, workshops, laboratories, studios, innovation hubs, learning resource centre • Sports and recreation facilities • Equipment and systems. • Increased student enrolment and graduate output • Increased research database • Improved skill quality of graduates • Number of registered landlords • Learning resource centre • Disability compliance of buildings
2.0 Business Development (MG3, MG4, MG5)		
2.1. Appropriate Human capital to undertake the new missions of the university 2.2. Appropriate budget for new university missions 2.3. Appropriate strategies of new university missions	• Completion of the innovation hub and factory shells • Provision of required equipment for the innovation hub and factory shells • Critical skills/expertise base e.g. researchers • Fully functional IBD office • Financing of innovations - Investors and strategic partners • High level buy-in from relevant stakeholders • ISO certification • Alumni – source of funding and	• Agreements, licenses and patents • Investments –increase in the number of PPPs, JVCs • Number of commercialised products/services • Revenue generation and profitability of SBUs • Spin-off companies • Business incubations • Industrial parks • Fully operational University farm • IBD Strategic plan within the context of the University strategic plan approved

Strategic Direction	Key Enablers	Key Performance Indicators (KPI's)
	prototypes • Supportive political environment • Availability of resources for a fully operational university farm • Full strategic plan for new University missions	• Innovation, product and service development plan approved
3.0 Technology, Innovation and Intellectual Property (MG1, MG3, MG4)		
3.1. Institutionalised innovation disclosure system 3.2. Formal link between RIO and IBD 3.3. Establish a technology transfer office / within the IBD directorate 3.4. Develop institutional economic, innovation, venturing, policy research, analysis and implementation	• ZIPO, ARIPO, WIPO • Trademarks and patents • Effective IP policy • Copyright • Neighbouring rights • Stable economic and political environment • Financial resources • Research grants	• Registered patents, trademarks, copyrighted material • Research output, collected artefacts / research data and prototypes. • Amount invested in R&D per period • Increasing number of in-licensing of patents in the University • Invention disclosure implemented • Formal joint planning and accountability for RIO and IBD overlapping activities • Technology transfer policy and office fully functional • Published articles on policy research and implementation matters • University-wide policy research and implementation capability.
4.0 Research, teaching and learning, and community scholarly engagement (MG2, MG3)		
4.1 Offer an excellent teaching and learning experience to students 4.2 Increase and diversify teaching and learning programmes. 4.3 Increase student enrolment 4.4 Increase the quality and quantity of applied research that impacts positively on society	• Stable economic and political environment • Infrastructure and equipment • Appropriate staffing • Improved ICT infrastructure (HPC) • Increased mobile phone penetration • Increased mobile internet connectivity • Internet of things • Relevant regulatory bodies and statutes • Existence of a research handbook • Research grants • Collaborations and affiliations • Receptive community • Research culture	• Number of publications in scholarly journals • Number of new programmes • Appropriate lecturer: student ratio • PhD per capita within the University • Increased enrolment of doctoral students • University ranking • Statement of assurance to compliance with environmental regulations • Number of MOUs signed • Increase in the quantum of grants • Increased community scholarly engagement (number of community projects per period)
5.0 Organisational Effectiveness (MG5, MG1)		
5.1. Governance 5.2. Staff profile balanced to deliver on required numbers and levels of graduates 5.3. Bias for recruitment as a result of unfreezing posts 5.4. Internationalisation of staff profile 5.5. Repatriation of diaspora human capital to NUST 5.6. Resource	• Staff and student exchange programmes • Networks and collaborations • Access to effective e-learning. • Stable economic and political environment • Recruitment policy (staff handbook) • Regulations on staff development • Works Council • Labour Act [Chapter 28:01] • Sustainable staff retention strategies. • Availability of resources (computers, laboratories, financial etc) • Teamwork	• Improved conditions of service • Increased percentage of staff acquiring PhDs • Increased recruitment of PhD holders and Professors • Increased number of non-teaching staff completing relevant programmes • Increased number of in-house training programmes • Reduction in vacancy rates • Acquisition of state of the art equipment • Improved and increased collaboration with other institutions of higher learning • Completion of job grading and salary review

Strategic Direction	Key Enablers	Key Performance Indicators (KPI's)
mobilisation 5.7. Staffing and staff development	• Collaboration with international organisations	• Reviewed staff handbook • Reviewed promotion procedures • Staff mentorship programmes • Establishment of stable staff succession plans
		• Finalised code of conduct • Reviewed functions of HR • Completed internal skills audit

Table 8: Strategic Directions
Person responsible: Vice-Chancellor

Strategic Direction 1: Infrastructure development												
Strategic Goal: Ensure the provision of adequate infrastructure for the growth of the University	**Key Performance Indicator (KPI)**							**Strategic Initiatives/Action Plans**	**Resources Required**	**Assumptions**	**Risks**
No.	Strategic Objective		Base	2019	2020	2021	2022	2023				
1.1	Complete all unfinished building projects on campus	% Completion of Campus Services Centre	65%	75%	85%	95%	100%	-	Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs, Project implementation.	US$15m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns
		% Completion of IT & Learning Resource Centre and Innovation Hub 2	55%	70%	85%	95%	100%	-	Engage sponsors Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs, Project implementation.	US$37m	Innovation hub funding remains available	Economic uncertainty, Cost Overruns Time Overruns,
		% Completion of Chemical Engineering Building	75%	75%	88%	100%	-	-	Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs,	US$6.5m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.

Strategic Direction 1: Infrastructure development									Strategic Initiatives/Action Plans	Resources Required	Assumptions	Risks
Strategic Goal: Ensure the provision of adequate infrastructure for the growth of the University		Key Performance Indicator (KPI)										
No.	Strategic Objective		Base	2019	2020	2021	2022	2023				
									Project implementation.			
		% Completion of Chemistry Building	70%	70%	85%	100%	-	-	Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs, Project implementation.	US$7m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
		% Completion of Student Residences	20%	30%	50%	70%	90%	100%	Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners.	US$21m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
									Finalise agreements through MOUs and MOAs, Project implementation.			
		% Completion of Central Stores (works)	80%	80%	80%	85%	100%	-	Engage in fundraising and other resource mobilisation activities, locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs, Project implementation.	US1.5m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
		% Completion of Innovation Hub 1	80%	100%	-	-	-	-	Engage sponsors	US$1m	Innovation hub funding remains available	Cost Overruns, Time Overruns.
		% Completion of Prefabricated Structures (Lecture rooms)	20%	100%	-	-	-	-	Engage in fundraising and other resource mobilisation activities,	US$0.7m	Availability of own resources	Economic uncertainty, Cost Overruns, Time Overruns.

Strategic Direction 1: Infrastructure development									Strategic Initiatives/Action Plans	Resources Required	Assumptions	Risks
Strategic Goal: Ensure the provision of adequate infrastructure for the growth of the University	Key Performance Indicator (KPI)											
No.	Strategic Objective		Base	2019	2020	2021	2022	2023				
									locally and beyond. Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs, Project implementation.			
1.2	Provide additional infrastructure for teaching and learning, research and social amenities (e.g. lecture theatres, laboratories, studios, learning resources centre, workshops, senior common room, chapel, sports facilities)	% Specialist Teaching Hospital	0%	1%	10%	30%	40%	50%	Design, Plan & Cost Project implementation Engage investors Engage in fundraising and other resource mobilisation activities Construct	US$100m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
		% School of Health Sciences	0%	1%	10%	30%	40%	50%	Design, Plan & Cost Project implementation Engage investors Engage in fundraising and other resource	US$100m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.

Strategic Direction 1:
Infrastructure development

Strategic Goal: Ensure the provision of adequate infrastructure for the growth of the University		Key Performance Indicator (KPI)							Strategic Initiatives/ Action Plans	Resources Required	Assumptions	Risks
		% Sports Stadium (20,000 seater)/Sports Complex	0%	0%	20%	40%	60%	80%	Design, Plan & Cost Project implementation Engage investors Engage in fundraising and other resource mobilisation activities Construct	US$9,350m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
		% Faculty of The Built Environment	0%	0%	0%	10%	30%	50%	Design, Plan & Cost Project implementation Engage investors Engage in fundraising and other resource mobilisation activities Construct	US$10m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
		% Faculty of Communication and Information Science	0%	0%	0%	5%	20%	35%	Design, Plan & Cost Project implementation Engage investors Engage in fundraising and other resource mobilisation activities Construct	US$10m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.
1.3	Operationalise the University Farm	% capacity utilisation	5%	15%	35%	55%	80%	100%	Design, Plan & Cost Project implementation Engage water authority Engage investors Engage in fundraising and other resource mobilisation activities Construct Identify and implement farming projects. Identify and engage funding partners.	US$5.86m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.

Strategic Direction 1: Infrastructure development												
Strategic Goal: Ensure the provision of adequate infrastructure for the growth of the University		Key Performance Indicator (KPI)							Strategic Initiatives/ Action Plans	Resources Required	Assumptions	Risks
1.4	Provide adequate utilities and facilities to service the University	% Availability of ICT services	25%	30%	40%	60%	80%	100%	Design, Plan & Cost Project implementation. Support fund raising activities, Solicit for donations.	US$6m	Adequate Funding	Inadequate funding
		% of Upgraded sewer and water reticulation system	60%	65%	75%	85%	95%	100%	Revamp and upgrade sewer and water reticulation system	US$1.5m	Improvement in the performance of the economy	Economic uncertainty, Cost Overruns, Time Overruns.
		% of repairs to campus roads and perimeter fence	70%	70%	80%	90%	100%	-	Repair campus road network and perimeter fence	US$2.9m	Improvement in the performance of the economy	Inadequate operational funds, cost escalations
		Number of factory shells constructed per year	0	1	1	1	1	1	Design, Plan & Cost Project implementation and support Fund raising activities. Solicit for donations.	US$15m	Adequate Funding	Inadequate capital funds, cost escalations
		Number of science , industrial and business parks constructed/ac quired per year	0	1	1	1	1	1	Design, Plan & Cost Project implementation and support Fund raising activities. Solicit for donations.	US$15m	Adequate Funding	Inadequate capital funds, cost escalations
1.5	Provide sustainable and adequate student housing	Number of students' beds completed (4000 beds)	160	0	0	1280	1280	1280	Negotiate PPPs and JVCs with potential partners. Finalise agreements through MOUs and MOAs. Project implementation	US$120 m	Investors remain committed	Economic uncertainty, Cost Overruns, Time Overruns.

Table 9: Strategic Direction 2: Business Development

Person responsible: Vice-Chancellor

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Strategic Direction 2

BUSINESS DEVELOPMENT

Strategic Goal : IMPLEMENT AN EFFECTIVE UNIVERSITY-WIDE BUSINESS DEVELOPMENT CAPACITY AND CULTURE

No.	Strategic Objective	Key Performance Indicator (KPI)	Targets						Strategy Initiative/Action Plan	Resources	Assumptions	Risks
			Base	2019	2020	2021	2022	2023				
2.1	Develop a fully functional business development office	Fully functional business development office established	-	1	-	-	-	-	Recruit a business manager Procure furniture and equipment	US$264000	Improvement in the performance of the economy	Bureaucracy
2.2	Establish new commercial ventures	Number of new commercial ventures	0	5	2	1	1	1	Apply and register new ventures	US$20m		
2.3	Set up start up projects	Number of incubated start ups	1	2	3	3	3	3	Identify projects for incubation. Engage with inventors.	US$50000	Availability of expertise	Poor quality of research output
2.4	Register IPs generated by NUST	Number of IPs for which priority date has been secured	0	2	3	4	5	6	Raise awareness on the IP processes.	US$12000	Availability of legal expertise	Lack of co-operation from stakeholders.
2.5	Improve consultancy work by the University	Number of consultancy projects undertaken	5	10	15	20	25	30	Conduct Consultancy work	Undertaken within the University budget and in the course of staff normal duties	Availability of expertise	Non-availability of consultancy projects Tarnishing of the University image.
2.6	Set up a Solar energy generating plant	% of project implementation	0%	30%	100%	-	-	-	Design, Plan & Cost Project implementation	US$8m	Investors remain committed	

Table 10: Strategic Direction 3 – Innovation and Intellectual Property

Person Responsible: Vice-Chancellor

No.	Strategic Objective	Key Performance	Targets						Strategic Initiative/Action Plan	Resources	Assumptions	Risks
Strategic Direction 3: Innovation and Intellectual Property												
Strategic Goal: Develop Innovation and Intellectual Property through enhanced research												
			Base	2019	2020	2021	2022	2023				
3.1	Develop and implement an innovation disclosure system	Innovation disclosure system developed and implemented	0	1				n/a	Appoint a team to develop the system	No additional funding required	Cooperation between IPSD and RIO	
3.2	Enhance innovative research by the University	Number of innovations captured from university research	6	7	14	21	21	21	Capacitate University researchers Establish and maintain a database of research generated in the Faculties	US$120000	Availability of expertise	Apathy from academics

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Strategic Direction 3: Innovation and Intellectual Property Strategic Goal: Develop Innovation and Intellectual Property through enhanced research					Targets							
No.	Strategic Objective	Key Performance	Base	2019	2020	2021	2022	2023	Strategic Initiative/Action Plan	Resources	Assumptions	Risks
3.4	Establish a Technology transfer office (TTO) to ensure a dedicated service for IP prosecution	TTO established and fully operational.	0	0	1	-	-	-	Increase the number of Patents in-licensed and out-licensed by the university. Increase research out-puts from Faculties	US$212000	Availability of expertise	Limited resources for TTO operations
3.5	Vet inventions from research for commercial viability	Working committee between RIO and IPSD established	0	1	-	-	-	-	Set up vetting Committee Conduct joint training	No additional funding required	Availability of expertise	
		Number of reports produced	0	3	3	3	3	3	Hold vetting meetings	No additional funding required	Availability of expertise	

Table 11 Strategic Direction 4: Research, teaching and learning and community scholarly engagement

Person Responsible: Vice-Chancellor

Strategic Direction: 4 Research, teaching and learning and community scholarly engagement Strategic Goal: Enhance research, teaching and learning and community scholarly engagement.					Targets							
NO	Strategic Objective	Key Performance indicator	Base	2019	2020	2021	2022	2023	Strategic Initiative/Action Plan	Resources	Assumptions	Risks
4.1	Offer an excellent teaching and learning experience to students	Student to Lecturer ratio Student Library resources ratio Student computer ratio % of vacant lecturer positions	1:50 1:5 1:40 32%	1:50 1:5 1:40 25%	1:40 1:5 1:30 20%	1:30 1:5 1:20 15%	1:30 1:5 1:10 10%	1:30 1:5 1:10 5%	Recruit more lecturers Construct more laboratories Purchase more computers Completion of the library	Resources catered for under SD1 and SD5 US$8.5m	Availability of suitably qualified human capital resources	Limited resources
4.2	Increase and diversify teaching and learning programmes.	Number of new programmes Number of new faculties Number of new schools Number of cross-faculty degree	- - 2 -	- - - -	7 - 2 1	- 1 - -	7 - - 1	- - 1 -	Develop new curricula Establish new Departments that evolve into Faculties / Schools Craft regulations that allow cross-faculty degree programmes	Resources catered for under SD1 US$25500	Approval and accreditation by ZIMCHE	Limited resources

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Strategic Direction: 4 Research, teaching and learning and community scholarly engagement Strategic Goal: Enhance research, teaching and learning and community scholarly engagement.			Targets									
NO	Strategic Objective	Key Performance indicator	Base	2019	2020	2021	2022	2023	Strategic Initiative/Action Plan	Resources	Assumptions	Risks
		programmes per Faculty Number of online courses offered at undergraduate level					2023		Identify, develop and offer new online programmes			
4.3	Increase student enrolment	Number of students	10706	10706	12100	14600	17500	21000	Market penetration and development strategies (refer to section 7, table 5 above)	Resources catered for under SD1 and SD5 US$151.81m US$1.7m	Improvement in the performance of the economy Interest in programmes offered by the University	
		Number of international students	66	66	100	120	200	300				
4.4	Increase the quality and quantity of applied research that impacts positively on society	Number of publications per Faculty per year.	10	15	20	25	35	40	Identify funding opportunities. Conduct research seminars.	US$1.25m	Academics utilise research days to publicise research output	Limited resources Research apathy
		Number of collaborative research MoUs operationalised		7	7	7	7	7	Increase the number of professors and research fellows. Publish research output Sign MoUs with identified partners	No additional funding required	There will be willing research partners	Lack of interest from potential partners Limited resources to attract and retain staff. Competition from other institutions Limited resources
		Number of academic staff enrolled for PhDs	125	125	135	135	125	115	Enrol PhD candidates	US$1.5m	Academics willing to undertake doctoral studies. Commitment to research	
		Number of external grants successfully secured	13	3	7	10	15	20	Train lecturers and research fellows to write grant proposals	No additional funding required		
4.5	Increase community scholarly engagements.	Number of additional community-related projects	16	2	3	4	5	6	Identify needs of the communities Identify community partners and sign MoUs. Create a community engagement skills competency list.	No additional funding required	Commitment of funding partners Community cooperation	Lack of funding. Delays in ethical clearance Staff apathy

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Table 12 Strategic Direction 5: Organizational Effectiveness

Strategic Direction 5: Organizational Effectiveness Strategic Goal: To ensure effective corporate governance		Targets						Strategic Initiatives/Action Plans	Resources	Responsible Person	Assumptions	Risks
No.	Strategic Objective	(KPI)	Base	2019	2020	2021	2022	2023				
5.1	Strengthen corporate governance	Number of additional policies developed and reviewed		100% review of existing policies	10	As required	As required	As required	Conduct corporate governance audit	US$776000	Chairman of Council	Availability of expertise	
		Number of corporate governance, Council instruments developed e.g., council charter		100% review of existing policies	As required	As required	As required	As required				Availability of expertise	
		Number of training workshops for councillors	2	1	1	2	1	1					
5.2	Strengthen academic governance	100% compliance with the NUST Act and other relevant statutes	70%	100%	100%	100%	100%	100%	Implement Works Council decisions Register Code of Conduct. Draw up a schedule of all statutes relevant to NUST Draw up a schedule of NUST policies and procedures Conduct training on academic governance Prepare and present Council reports		Vice-Chancellor	Availability of expertise	
		100% implementation of Council decisions	-	100%	100%	100%	100%	100%					

Strategic Direction 5: Organizational Effectiveness Strategic Goal: To ensure effective corporate governance				Targets					Strategic Initiatives/Action Plans	Resources	Responsible Person	Assumptions	Risks
No.	Strategic Objective	(KPI)	Base	2019	2020	2021	2022	2023					
5.3	Strengthen leadership skills and competencies	Number of NUST scheduled in-house training workshops		3	3	3	3	3	Carry out a training needs analysis Engage suitably qualified trainers and conduct workshops	US$150000	Vice-Chancellor	Availability of expertise	
5.4	Reduce staff vacancies	Percentage vacancy rate	32%	25%	20%	15%	10%	5%	Carry out a skills audit. Develop an annual staff statistics report Recruit, develop and retain qualified and experienced human capital. Develop a staff succession plan. Develop motivational programmes for staff	US$37,5m	Vice-Chancellor	Lifting of employment freeze and mobilisation of internal financial resources Availability of qualified prospects. Appropriate performance management systems Mentoring programmes in place Availability of funds	Lack of suitably qualified candidates Lack of appropriate mentors and mentees Lack of attractiveness of the programmes
5.5	Grow University revenue	% increase in revenue per annum	26%	30%	35%	40%	45%	50%	Increase market share through market penetration and market development (refer to Table 5) Engage in product development/re-development Diversify income streams Develop debt recovery systems Facilitate access to student loan schemes	Catered for under SD2	Vice-Chancellor	Improved performance of the economy Approval of RTGS fees Cooperation of stakeholders Economic stability Cooperation of stakeholders Students meet loan requirements Cooperation from financial institutions. Affordable interest rates	Changes in the political and economic environment Resistance No demand for developed products. Non-acceptance of products by ZIMCHE Failure to identify and benefit from income generating projects. Government not allowing collections.

Strategic Direction 5: Organizational Effectiveness Strategic Goal: To ensure effective corporate governance		Targets							Strategic Initiatives/Action Plans	Resources	Responsible Person	Assumptions	Risks
No.	Strategic Objective	(KPI)	Base	2019	2020	2021	2022	2023					
													Students may not meet loan requirements.
5.6	Manage costs	Cost to revenue ratios (expressed as %)	102%	100%	98%	95%	93%	90%	Prioritise expenditure Implement cost cutting measures	Efficient IT system		Improved economic performance Stability in pricing	Policy inconsistency

9.0 MONITORING AND EVALUATION

Monitoring and evaluation will be undertaken using the tool in Table 8 and performance review meetings. These can be supplemented by graphical representation.

Table 13: Monitoring and Evaluation Plan

Measurable Attributes	Set Targets (KPIs)	Monitoring	Evaluation	Corrective Action	Time-Frame	Sources of Verification
Qualitative values	Quantitative values	Performance Measurement over time and reporting	Comparison of actual performance against targets and noting of variation	Take corrective action to address negative variances	Quarterly	Source records of performance

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Appendix 1: Vice-Chancellor' Office Proposed Organogram

Strategic Organogram for the VC
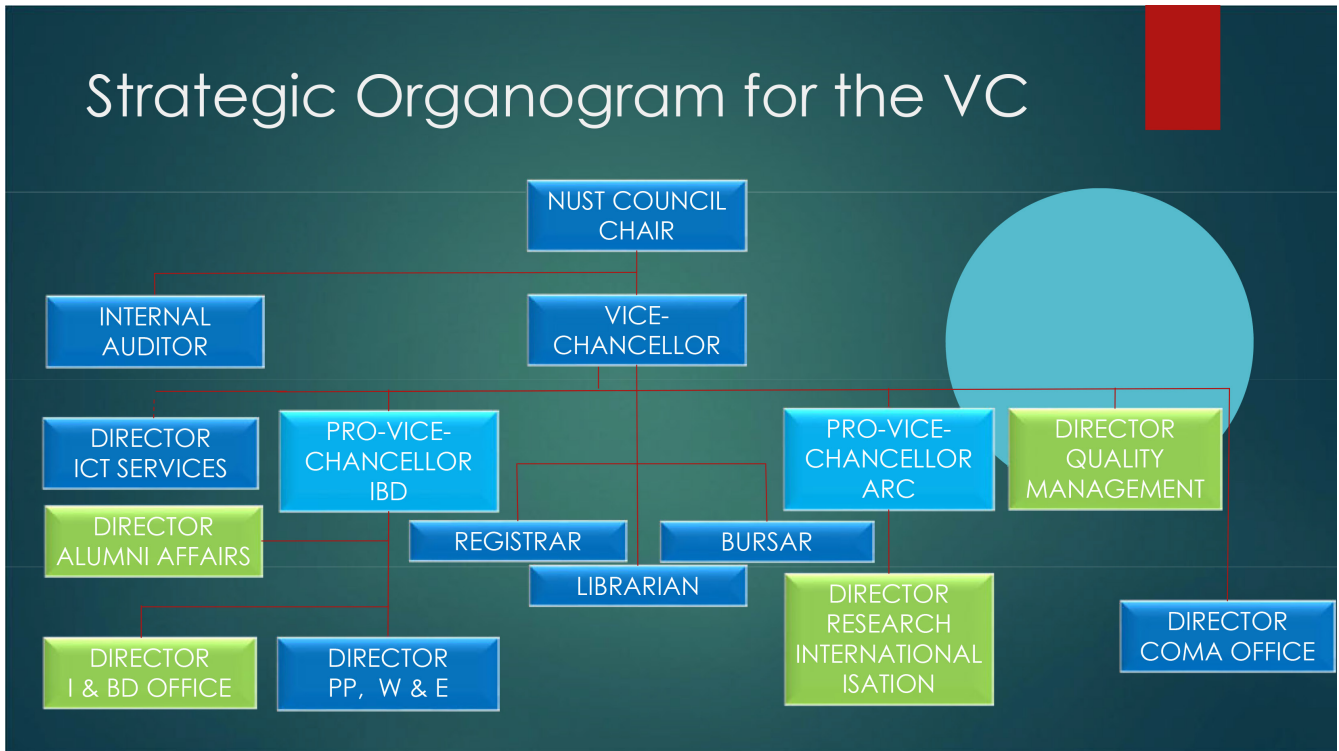
Appendix 2: PVC IBD and Pro-VC ARC Strategic Organogram

Strategic Organogram for PVC ARC
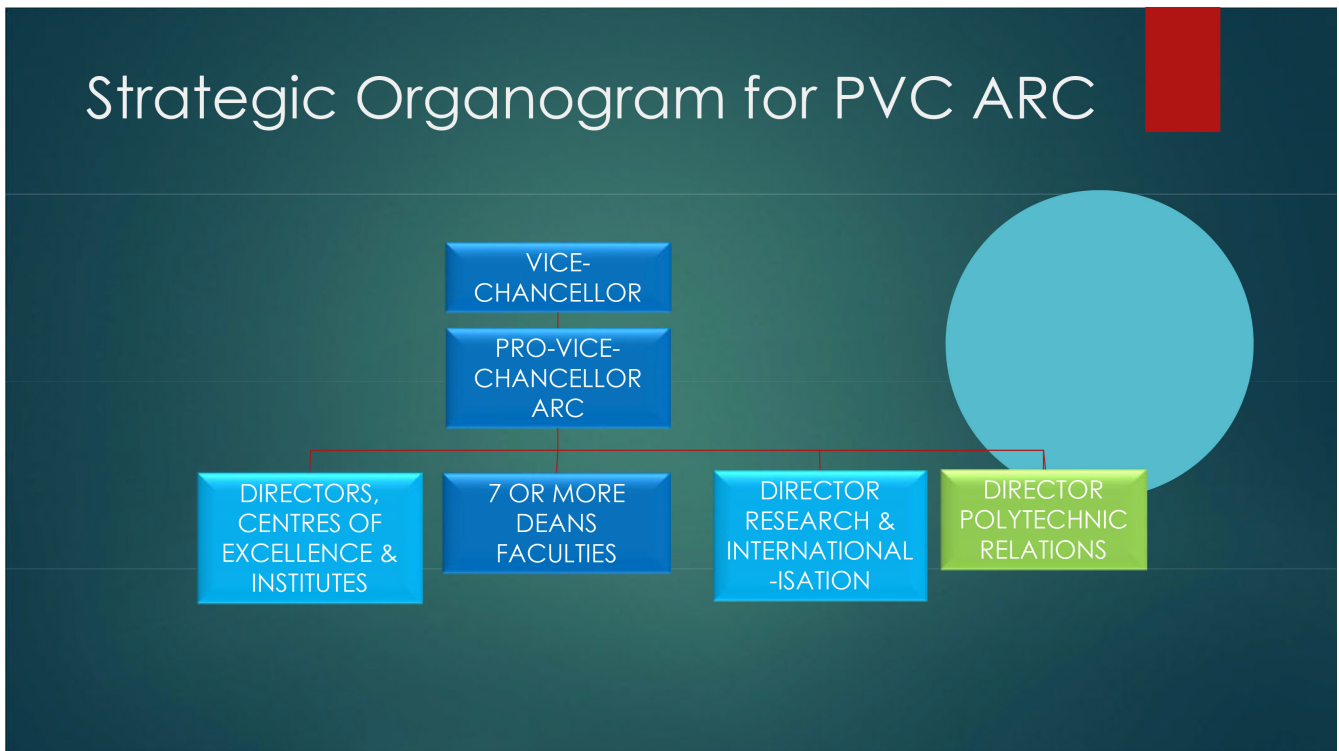
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Strategic Organogram for PVC IBD

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                    │  CHANCELLOR   │                │
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                    │  PRO-VICE-    │                │
                    │  CHANCELLOR   │                │
                    │     IBD       │                │
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       ┌───────────────────┼──────────────┬─────────┴─────────┐
┌─────────────┐    ┌─────────────┐  ┌─────────────┐    ┌─────────────┐
│  DIRECTORS   │    │  DIRECTOR   │  │  DIRECTOR   │    │  DIRECTOR   │
│  STATUTORY   │    │ I & BD OFFICE│  │  PHYSICAL   │    │   ALUMNI    │
│   BODIES     │    └─────────────┘  │  PLANNING,  │    │  RELATIONS  │
└─────────────┘                      │   WORKS &   │    └──────┬──────┘
                                     │   ESTATES   │    ┌─────────────┐
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                                                        │   OFFICER   │
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