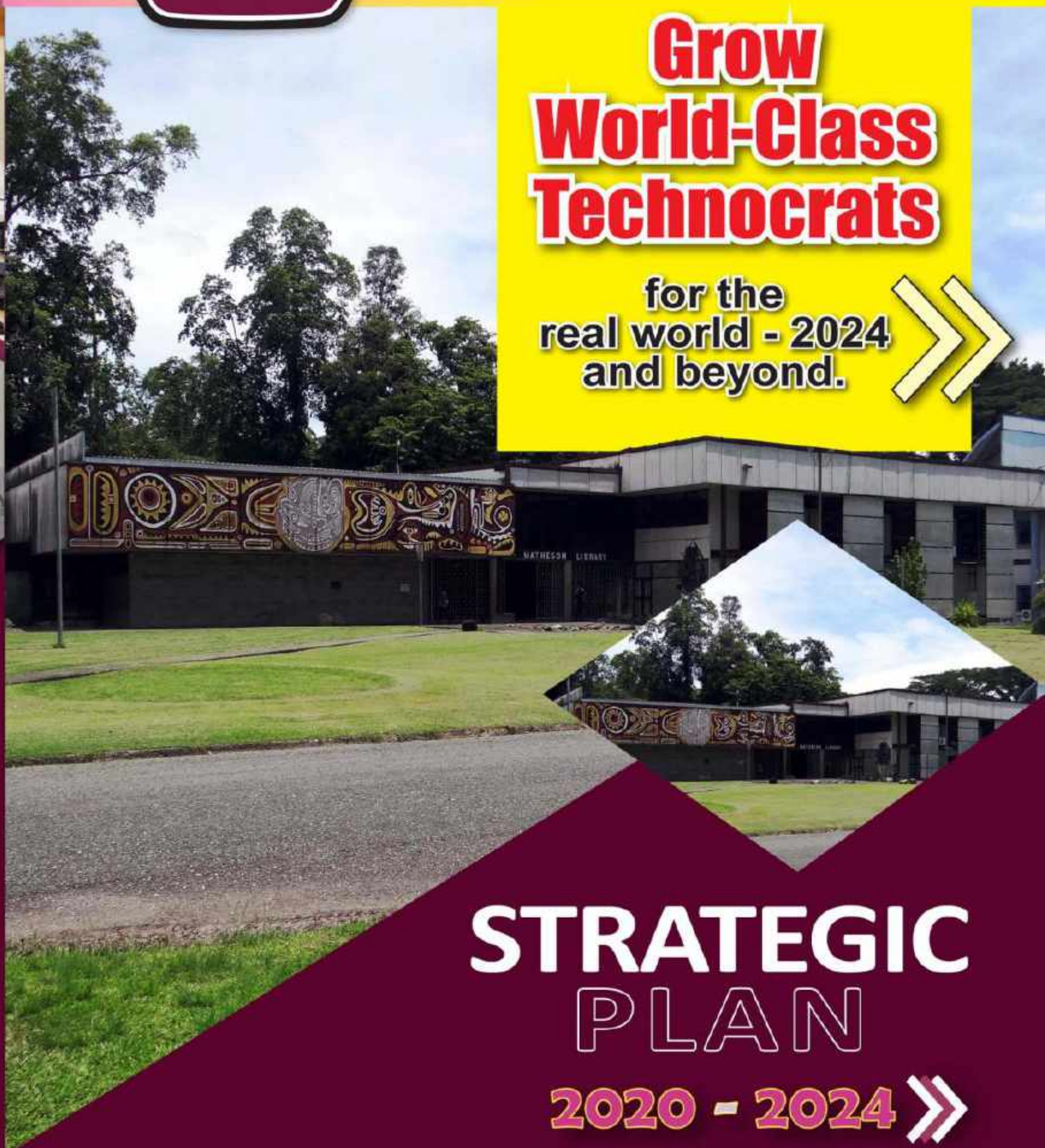




PAPUA NEW GUINEA
UNIVERSITY
OF TECHNOLOGY

**Grow
World-Class
Technocrats**

for the
real world - 2024
and beyond.



**STRATEGIC
PLAN**

2020 - 2024 >>



OUR VISION

GROW WORLD-CLASS
TECHNOCRATS FOR
THE REAL WORLD - BY
2024 AND BEYOND



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We acknowledge and pay respect to the traditional landowners, the indigenous people of Kamkumung Village and the Ahi people, past and present, on whose land the Papua New Guinea University of Technology is located and on which we walk, work, live and co-exist.



MINISTER'S STATEMENT

I am privileged and honoured to make this opening statement to herald a new journey of fundamental transformation for the Papua New Guinea University of Technology, starting with its new blueprint for 2020 to 2024 with the Vision: "To Grow World-Class Technocrats by 2024 and beyond".

It is indeed a commendable, must I say, proactive initiative and effort of the Council and Management of the PNG University of Technology. Especially, in taking the aspirations, ideals and goals of Vision 2050 and seeing what it, as a higher education institution, can do (both in its respective micro and the higher education sector) in growing the next generation of technocrats, such as engineers, scientists, architects and builders, business leaders, surveyors and many more roles.

I see a close correlation and alignment of its effort with Vision 2050, which expresses the aspirations of every Papua New Guinean to fulfil the dreams of our founding fathers and to ensure that the correct mechanisms are in place for our country's future. Just like Vision 2050, the challenge for PNGUoT is to ensure that it sets clear, attainable goals and thus secure our common future well-being by building its internal capabilities. Critical lessons have been learned, which are now guiding us.

These lessons are:

- Papua New Guinea needs a vision to guide sequential medium-term development plans over a longer period;
- Papua New Guineans must embrace noble values and positive attitudes and learn to become powerful forces and change agents for development and nation building;
- Papua New Guinea must set minimum standards for its institutions and systems so that their integrity is not compromised. Institutions and systems must be compelled and committed to deliver high quality services to all citizens at all times, particularly in tough economic periods;
- having an abundance of natural resources does not, ipso facto, make nations socially poor or prosperous;
- race or skin colour of citizens or residents does not make nations socially or economically poor or prosperous; and
- the essential difference must be in our attitude, mind-sets, dedication and commitment to pursuing sustainable socioeconomic development.

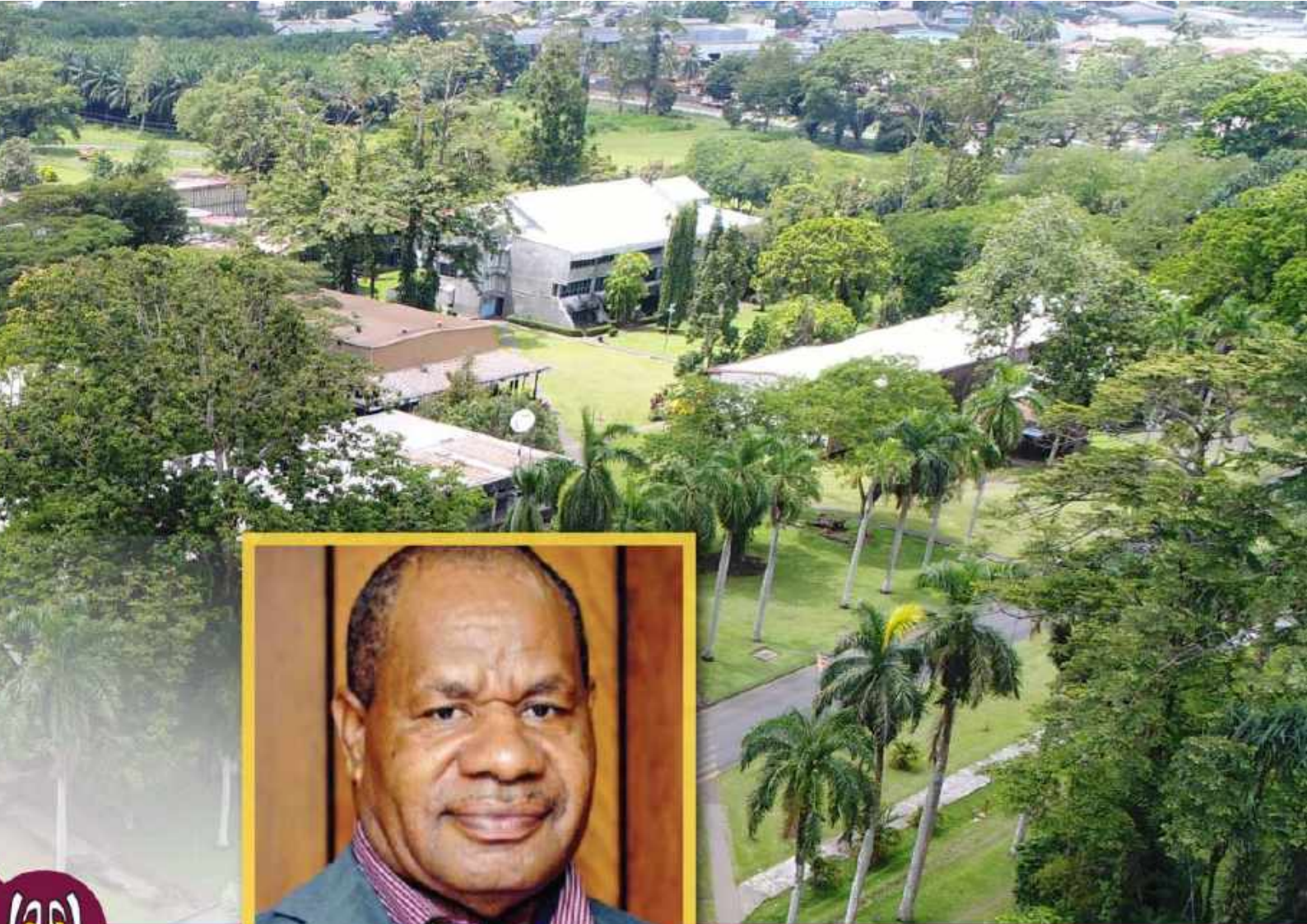
After over 44 years of political independence, we are critically reviewing our systems, institutions and policies because our people are demanding better ways forward and better performance results for the future. In development thinking, two major changes are critical, if we are to deliver better quality results:

- Papua New Guinea must have a 'long-term strategy' to underpin, guide and support its current medium-term development strategies;
- Papua New Guinea's policies, institutions and systems must shift from the current 'scarcity mentality' to the positive 'abundance mentality' to activate this paradigm shift.

Vision 2050 embraces the five National Goals and Directive Principles that are enshrined in our Constitution as our Guiding Principles:

- ✓ Integral Human Development;
- ✓ Equality and Participation;
- ✓ National Sovereignty and Self-Reliance;
- ✓ Natural Resources, Resource Creation and Environment; and
- ✓ Papua New Guinean Ways.

Considering the emerging global economic trends, and considering the rapid change in technology, demographic shifts and environmental concerns, we must seek creative but time-tested ways and techniques to position Papua New Guinea in the global environment in order to maximise its comparative and competitive advantages, thereby including an additional "Guiding Principle whereby Papua New Guinea is Progressive and Globally Competitive".



The Papua New Guinea University of Technology's Vision and Strategic Plan encapsulates all the above and provides a tangible plan and road map for the University to remain progressive, modern and continuously in step with change and the pace of development.

In the Human Development, Gender, Youth and People Empowerment agenda, the following statements are projected to form the basis of socioeconomic growth and in particular the **Higher Education** sector.

- ✓ Expand teaching, technical, business, forestry, fisheries, maritime, tourism and hospitality, and community colleges that are recognised as institutions of higher education;
- ✓ Expand the state universities and support private universities and other institutions;
- ✓ Introduce good citizenship, ethics, morality and personal viability in all education and training institutions' curricula;
- ✓ Establish a National Curriculum, Assessment and Monitoring Authority;

- ✓ Establish an Education Endowment Fund;
- ✓ Establish an Industrial Technology and Development Institute;
- ✓ Establish a Papua New Guinea Open University to coordinate flexible learning programs of the four state universities.

On behalf of the Government and the Ministry of Higher Education, Research, Science and Technology (DHERST), I take this opportunity to commend the Council and the Management of the Papua New Guinea University of Technology and urge all stakeholders (private and public sector, bilateral and multilateral partners) to work in concert to make this vision a reality.

Hon. Nick Kuman, MP

Minister for Higher Education, Research, Science and Technology



CHANCELLOR'S STATEMENT

Taking the cue from the opening remarks by the Honourable Minister, I would like to provide some institutional context and backdrop to this prolific journey embodied and envisioned in our Strategic Plan for 2020 to 2024.

Firstly, the Council of the Papua New Guinea University of Technology (PNGUoT) passed a specific resolution to have full carriage and responsibility of Strategic Planning in close conjunction and collaboration with the Executive Management. This elevates strategic planning to the highest level of authority and gives this important management tool the significant stature that it deserves.

Secondly, over the course of the past years, we have made many in-roads and accomplished much, but there are more paths to clear and transverse. Many of these tangible accomplishments have helped to stabilize and enhance operations and services. Some of these milestone accomplishments are:

- ✓ Arrested gross maladministration by introducing good governance and prudential controls and accountability;
- ✓ Ensured all accounts are properly audited and updated;
- ✓ Streamlined and enhanced operational efficiency and effectiveness of the Bursary;
- ✓ Improved and enhanced overall campus security;
- ✓ Endeavoured to repair some of the dilapidated infrastructure including sealing of the campus roads, construction of security fence around the campus, construction of a new male dormitory and inner fencing of the male dormitories;
- ✓ Cleaned up corruption in student administration and registration by implementing transparent online registration;
- ✓ Secured satellite infrastructure to improve internet communications, portability and accessibility;
- ✓ Conducted a full quality audit of the University;
- ✓ Streamlined and rationalized business arms of the University; and
- ✓ Commenced international accreditation of all courses of study offered by PNGUoT



While many of these accomplishments are worthy value additions to the overall vibrancy and optimum operations of the University, they were accomplished in a piecemeal manner. The Strategic Plan of the Papua New Guinea of Technology provides a classic management tool and a professional structure, system, process and discipline to build on what we have accomplished.

It starts at the fundamental base by looking at where we were (our history, our legacies), where we are at present (our strength and weaknesses, our opportunities and threats) and where we want to be in future.

It charts our vision for the next five (5) years, which is to **"Grow World-Class Technocrats for the Real World by 2024 and beyond"**.

We believe this Vision is not far-fetched but is realistically attainable, considering the fact that we have started the process to obtain international accreditation for some of our courses of study.

We are conscious that many Strategic Plans are well intended, but in many cases fail miserably because the action steps and tactical plans needed to operationalize them are not properly defined, articulated, prioritized and synchronized. There must be a commitment to mobilize resources, funding, appoint competent people and allot specific timelines and milestones to ensure the Strategic Plan is successfully implemented.

In our case, we have learnt lessons from the mistakes and success of others and have taken time to give our Strategic Plan a futuristic modern look, but ensuring that it is *realistic, relevant and achievable*.

We have articulated in a concise, succinct way our vision that captures our aspirations and ideals of a preferred future. In the order of sequence, we have adopted a

- ✓ **Vision**,
- ✓ supported by a **Mission Statement** to remind us why we are here and our actual state of being,
- ✓ our **Points of Difference** which provides a competitive edge,
- ✓ seven (7) Strategic Domains or Foundational Pillars of our Institution,
- ✓ at the operational and micro levels our **Strategic Goals**, which are more specific goals using the **SMARTER** technique (i.e., **Specific, Measurable, Achievable, Realistic, Time-bound, Evaluative and Readjustable**), and
- ✓ clearly defined delegation and assignment of **Key Performance Indicators (KPIs)**.

All these will be implemented, monitored, evaluated and measured using the **Balance Scorecard** tool with built-in timelines for regular reporting by Management and reviews by the Council.

The foregoing shows our collective convictions for achieving the big picture, by simultaneously embracing and using enabling proven management tools and techniques to ensure we successfully accomplish the Strategic Plan come 2024.

Finally, this journey of fundamental transformation is about assuring the well being of all the stakeholders (i.e., the students, academic staff, administration staff, parents, public and private sectors and civil society). We all have a stake in ensuring that together we can achieve our **Vision: Grow World-Class Technocrats for the Real World by 2024 and beyond**.

May God bless and grant us all wisdom, knowledge, discernment and selfless endeavour to do what we can for our society and people.

Ms Jean Kekedo, CSM, OSJ, OBE
Chancellor



VICE CHANCELLOR'S STATEMENT

The delivery of the Papua New Guinea University of Technology (PNGUoT) vision *“to grow world-class technocrats by 2024 and beyond”* will require staff and students of the University to embrace its role in Society. Its role is to be a knowledge hub of science and technology out from which will grow world-class technocrats who will have the opportunity to find employment either (a) internationally, or (b) nationally with any world-class companies (c) in industry or community projects in PNG, so as to contribute towards improving the livelihood of the people both in the urban and rural areas. The capacity of knowledge in science and technology among faculty which is imparted to graduates and disseminated through post-graduate research is sufficient to contribute effectively towards nation-building. World-class technocrats will grow only out of a world-class University, in keeping with Vision 2050.

PNGUoT's mission is to grow world-class technocrats through high-quality experiential teaching and ardent application of science and technology. The PNGUoT Strategic Plan 2020 - 2024, prepared to attain this mission, comprises of 7 strategic domains which form the basis of the projected goals and objectives. The 7 domains are:

- i. Strengthen governance and institutional capacity,
- ii. Pursue academic excellence through teaching and learning
- iii. Develop an effective research culture and technology transfer mechanism.
- iv. Reorganize the workforce to be resolute and disciplined
- v. Increase access through physical and virtual Infrastructure support
- vi. Develop a strategy for financial self-sufficiency
- vii. Strengthen partnership with industry (government and private) and bilateral and multilateral partners and overseas universities.

Strategic goals and objectives were derived from the following institutional review exercises;

- a. The 2010 Namaliu and Garnaut Report
- b. The 2014 Institutional Audit conducted by experts from Australian Universities

- c. The 2014 SWOT analysis carried out by the Senior Executive Management Team (SEMT)
- d. Directions from Government (Vision 2050 and MTDP III 2018 - 2022, SDP 2030, Higher & Technical Education Strategic Implementation Plan (2017 - 2038) and Private Industry inputs on quality of academic programs (accreditation).

In view of the Namaliu-Garnaut report and the Institutional External Audits, the University of Technology seriously required a renewed focus on achieving a high level of excellence in its academic programs. The Industry Advisory Board (IAB) was appointed to review the benchmarks for our academic programs to industry and international standards. The accreditation process for engineering and science programs has begun and is on-going. It is part of the strategy for all other courses to be accredited to accepted standards as well. The PNGUoT Academic Quality Assurance Team (AQAT) has instituted best practices in teaching to ensure that lecturers are delivering learning and assessment tasks as planned. This is reflecting our contemporary emergence as a powerful and respected international educational institute with distinct points of difference in the marketplace.

The main agenda for government is increased access. PNGUoT will thus increase year 1 student intake by 15 - 20% each year starting in 2020. Upscaling of resources including human, finances and infrastructure, will be required, firstly to accommodate increasing number of students and secondly to deliver academic excellence. Good governance and leadership practices must be embedded into the organization. Upholding values of high ethical standards, transparency and accountability, diversity and inclusivity, innovation and passion by all staff is critical to attracting support from all stakeholders. PNGUoT has had two years of unqualified audits and has regained credit worthiness status by industry, local, regional and international partners and will continue to aim at strengthening that position annually.



Worldwide recruitment of quality academic staff will continue, while training of national staff through post-graduate research and coursework will expand. PNGUoT boasts the largest postgraduate program in the country and Academic Departments have strategies in place to increase faculty numbers and their technological skills through research. Diagnostics analysis and feedback from industry will guide the process of reviewing curriculum to meet industry and community demand for development. Cutting-edge research and innovation is an area that is growing and must be consolidated. Funding support will be available for research and community development programs that are of relevance to industry and government strategy.

In order to attract continued support from government, PNGUoT's Strategy must align to government strategy. Prime Minister Honorable Marape has a vision to see PNG become the "Richest Black Christian Nation". This vision is achievable partly through the Government's Medium Term Development Plan (MTDP) III, which is focused on *"growing the economy" through commercial agriculture*. PNGUoT, through its respective research and development institutes, will be centers for science and technology transfer, rolling out training and development programs for industry and communities alike.

These programs will be focused on improving the quality of life of both urban and rural dwellers. An Appropriate Technology and Community Development Institute will continue to participate in facilitating community projects, including power and water supply systems.

Financial Self – Sufficiency is a major challenge for PNGUoT. The Uni-city Development program is a venture that will be pursued towards commercializing the University's large land resources and improving internal revenue generation. Other sources of income will be consolidated through research, consultancy and growing the income derived through our commercial operations, such as Unitech Enterprises Ltd. Cost-saving measures have already been actioned. Efficient use of resources and self-reliant projects will be pursued. Renewing and improving working relationships with key partners (such as industry, other Universities and Governments and Communities) is a key objective because a strong relationship with our Industry Partners is critical to strengthening support for vital training programs.

Associate Professor Dr Ora Renagi OL
Vice Chancellor

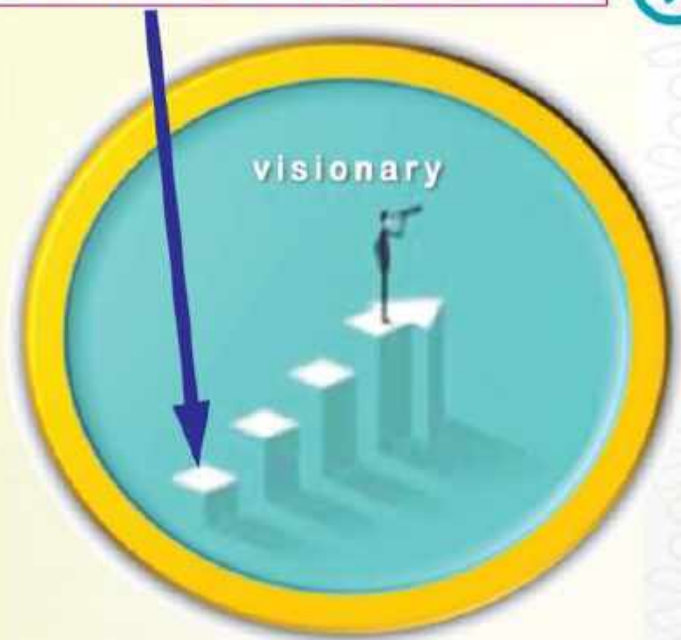
OUR CONTEXTUAL STARTING POINT

Our Strategic Plan involves multifaceted, constant and dynamic transformational change. It is crucial for Unitech's journey of transformational change to capture the institution's historical context. It is necessary and critical because without this we are likely to mislay our bearing and sense of direction.

The contextual background enables and empowers us collectively;

- To embark on a journey of transformational change, knowing where we came from; what we were like as an institution and what our organizational culture was. Especially, what the institution was like prior to the transformational change.
- To provide a vital 'point of reference' because we have to know where we came from in order to understand and know where we want to go in the future.
- To provide a critical Starting Point (Point of Origin) that is vitally important to enable us to accurately measure and track progress and know whether progress is attained in the right sequence and on the right path.

CONTEXTUAL - STARTING POINT



Papua New Guinea University of Technology (PNGUoT) – Historical Context

Introduction

For clarity in understanding the purpose of the Strategic Plan 2020 – 2024 and the future roadmap, it is appropriate to present an overview of the most recent history starting from 2012 onwards. The year 2012 saw the culmination and pinnacle of over 20 years of challenges and problems that hindered, inhibited and disrupted the University of Technology from effectively fulfilling its mandated tertiary/higher education charter.

Official Report (2012 – 2013)

The events in 2012 and 2013 are succinctly captured in a report dated 17th April 2013 by the Office of Higher Education (OHE). The report provides a fitting background context and starting point because of the stand-off in 2012/2013 at PNGUoT main campus that involved, in particular, the University Chancellor and the Council on the one hand, and the students and staff on the other. OHE was then directed by the National Government to defuse and resolve the problem.

A working Committee set up by OHE contended that the genesis of the stand-off was symptomatic of an agglomeration of events that evolved over time. It reached a pinnacle and was exposed publicly in April 2012 culminating in Council and management ruction and student turmoil and restlessness in 2012 and 2013.

The student body and some staff members were disappointed and disillusioned by years of alleged poor governance practices and maladministration by the University Council.

Other problems and challenges emanated from a mixture of exogenous factors (i.e. issues that the University does not have control over) such as the difficulties of accommodating increasing number of students from top-up high schools around the country and limited and declining annual financial allocation by the government.

What was at stake amidst the crises was the prime role of the Papua New Guinea University of Technology, as an indispensable educational asset for the people of Papua New Guinea.

To that end, the Mediation Team discerned that while the findings of this process points to shortcomings by different stakeholders at the University, the National Government was equally to be blamed for its lacklustre oversight of its responsibilities. While the design of the University Act kept away successive governments to remain at arm's length, it did not mean that the government should shirk its responsibilities. In retrospect, the government should have done their utmost best to protect the University from 'internal' harm.

The Mediation Team concurred with the renowned cliché that every experience offers positive and negative insights to the consideration of options that can be leveraged to chart ways out of the predicaments. The recommendations provided the way forward to assist PNGUoT recapture its renowned academic excellence and position in terms of its contributions towards the development of Papua New Guinea.



The OHE Committee Findings (Pre – 2012)

The findings are summarized as follows:

- Broad and gross dereliction of leadership - Council's leadership of the University was seen to be lethargic, derelict, lacked foresight and vision, weak and compromised governance.
- Weak management by the previous Administration, which allegedly led to extensive maladministration, poor staff discipline, staff-infighting and poor policy design and implementation.
- Ineffective administration with antiquated structures, systems, processes and bureaucracy.
- Poor funding of the University over many years by the National Government.
- Poor synchronisation of Government policies - in this case, the haste to push through top-up high schools but not preparing tertiary institutions including PNGUoT to carry the extra student load with the quality of students required.
- High turnover of qualified staff caused mainly by better employment conditions elsewhere. This led to a significantly higher level of reliance on expatriate staff, which then became a financial burden for the University.
- National teaching and support staff members had for a long time, felt that their welfare and career development and progression issues had not been adequately attended to or addressed.
- Mismanagement practices that aided and abetted corruption and fraud.
- Students feeling that they were not getting the type of attention or services that they expected and deserved.
- Quality of higher education had deteriorated and many courses offered at the University were, in most instance, incongruent with industry and labour market expectations in Papua New Guinea.
- Prudential financial controls had broken down;
- Increase in student numbers had outstripped resources and institutional capacity.
- Institutional infrastructure had fallen into dilapidation and aged due to poor discipline of maintenance and upkeep. Financial pressure had inhibited investments in new infrastructure and utilities.

THIS LED TO THE FOLLOWING MILESTONE ACTIONS & STEPS AND PROVIDED THE FOUNDATION FOR REBUILDING THE PNG UNIVERSITY OF TECHNOLOGY

Landmark Intervention and decisions by the National Government

The National Executive Council (NEC) in a special meeting on 23rd January 2013 made the following landmark decisions.

- Directed the then Minister of Higher Education, Hon. David Arore, MP to exercise his mandated power to;
 - ✓ Terminate the maladroit University Council
 - ✓ Appoint an Interim Council consisting of;
 - Sir. Nagora Bogan, KBE – Interim Chancellor.
 - Mr. John Napu (Lawyer) – Interim Councillor.
 - Mr. Ken Ngangan (President – CPA PNG) – Interim Councillor.
 - Mr. Joseph Hamylton, OBE – (President – IEPNG) – Interim Councillor.
 - Mr. Allan McLay (President – Lae Chamber of Commerce) – Interim Counsellor.
- Approved the appointment of retired Judge – Justice Mark Sevua and allocated funds for the Judge to head up a team of five to investigate and report on the insidious problems plaguing the PNGUoT
- The Interim Council worked closely with the management to;
 - ✓ Mediate and diffuse the stand-off between students and staff and the National Government.
 - ✓ Confirm and substantiate the appointment of the Vice Chancellor in order to diffuse the stand-off and restore order, peace and stability.
 - ✓ Assist with logistical support for the Retired Justice Mark Sevua Investigations Committee.
 - ✓ Implement the recommendations of the Committee and the Namaliu/Garnaut Report.
 - ✓ Lead a team of inhouse and external lawyers to mitigate and resolve most frivolous legal actions.
 - ✓ Commence work to streamline and formalize appointment of a full Council with a mix of skills and competencies to assist restore and provide effective leadership and stewardship of transforming the PNGUoT.
- Sir Nagora, KBE presided as Chancellor from 2012 to December 2016 and resigned. Madam Jean Kekedo took over as Chancellor and consistently continued the programs for rebuilding and catalyzing transformation.

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Milestone Accomplishments (2013 - Present)

- Initiated and commenced reconstruction of Institutional Governance with good mix of competent Council members from private and public sector and civil society. Better oversight of strategy, policy and stewardship of management was ensured.
- Introduced best practices and processes of accountability and prudential financial management which culminated in proper and robust audit of all back year accounts up to 31st December 2018.
- The accounting processes were streamlined and rationalized in the Bursary including recruitment of a competent Bursar.
- Streamlined Human Resource functions, systems and processes to ensure effective oversight and rendering of better services to staff.
- Commenced programs to rehabilitate dilapidated infrastructure with repairs and sealing of campus roads and streets, repairs and building of new dormitories. Investments were made in sequential repairs and construction of staff houses to meet increasing intake of new staff. The campus wide perimeter fence was constructed including the internal dormitory fencing to improve student security.
- Commenced process to rebuild and repair the institutional reputation and brand of the University through active interface, network and interaction with the Public and Private Sector and Civil Society.
- Established PNGUoT Alumni.
- Introduced online student registration and administration to improve level of service and weed out malpractice.
- Commenced process to make the PNGUoT more congruent with modern best practices of University Administration.
- Reformed student by-laws on Student Representative Council to promote National Unity, cultural tolerance, diversity, inclusiveness and peaceful co-existence.
- Invested initially in installation of O3B Satellite to improve internet accessibility and latency. Progress is made on new and cheaper options to migrate to the new fibre optic cable managed by DATACO Ltd.
- Introduced laptops supply to all first year students.
- Commenced work on due diligence to obtain International Accreditation of all Engineering courses with plans to extend to all courses offered at the PNGUoT.
- Intensified and expanded leadership and management training for administration and academic staff.
- Expanded collaboration with other Universities, both local and overseas, to strengthen interface and support through partnerships such as;
 - ✓ Twinning Arrangements with James Cook University.
 - ✓ Memorandum of Understanding (MOU) with University of Queensland to collaborate and cooperate on a rural electrification program.
 - ✓ MOU with Swinburne University to explore viability of PNGUoT being a dual sector university, which can offer wide range of courses as pathways for Grade 12 School Leavers, improve TVET course content quality, customize course content relevant to needs of mainstream society and private sector and efforts to guide bench-marking of TVET courses to international standards.
- Reviewed and introduced stringent governance and prudential financial audits and oversight of the business arms such as the University Development Company (UDC) and NATSL.
- Terminated outsourcing of catering because of exorbitant costs and established inhouse campus catering for students.
- Formalized amalgamation of Forestry College in Bulolo, Timber College and Unitech Nursing College and improved overall institutional governance, oversight and prudential financial accountability and controls.
- Commissioned master plan for the effective utilization and mobilization of PNGUoT land. This culminated in establishment of a University Master Planning Committee with a charter to support the Council in planning to;
 - ✓ Develop a City within a City on PNGUoT Campus.
 - ✓ Conduct a comprehensive survey of the campus land with better planning and utilization of the land with contingency plans for future expansion.
 - ✓ Conduct a comprehensive audit and inventory of all University infrastructure, buildings, installations and public utilities.
 - ✓ Oversee and co-ordinate construction of new campus infrastructure such as the new dining facility, multi -purpose hall, student amenities and establish plans for consistent renovation and refurbishments of decrepit assets and infrastructure.
- Commenced processes in 2019 to formulate a 5 year Strategic Transformation Plan 2020 – 2024 and accomplish the PNGUoT Vision of "Growing World Class Technocrats for the Real World".



OUR FUTURISTIC ROADMAP



OUR VISION

Grow
World-Class
Technocrats
for the
Real World

OUR MISSION

To grow
world-class
technocrats
through high
quality
experiential
teaching, research
and ardent
application of
science,
technology and
innovation.



OUR POINTS OF DIFFERENCE

- World Class Technocrats
- Real World Experiential Learning
- Ardent Application of Science, Technology and Innovation
- Student Centered Learning Environment
- Active Community Interface and Collaboration

OUR VALUES

- ✓ High Ethical Standards
- ✓ Professionalism
- ✓ Diversity and Inclusivity
- ✓ Innovation and Initiative
- ✓ Pride and Passion

PNGUoT CORE VALUES

Core Values	Value Statements
1 High Ethical Standards	We maintain the highest ethical standards in all interactions, giving us the ability to realize the greater good in our actions and programs with: Honesty, Integrity, Accountability, Respect, Wisdom and Responsibility. These virtues challenge us to look at our work and ourselves as one united with others across Papua New Guinea and the globe.
2 Professionalism	We are committed to demonstrating the highest standard of competence and skills, engaging in work with respect, openness and trust in pursuit of a common purpose, having regard for individuals, ideals and the institution as a whole. Accepting responsibility for achievement of common goals and objectives, good stewardship of assets and active promotion of gender balance, equal opportunity, ergonomic workplace, protection and safety.
3 Diversity and Inclusivity	We appreciate that each individual is unique and different. Therefore, we subscribe to diversity as enunciated in Section 55 of the Constitution of the Independent State of Papua New Guinea which calls for equality of citizens in all areas of social, economic and political development irrespective of race, tribe, and place of origin, political opinion, colour, creed, religion or sex. We extend this to include age, people living with disability and HIV Aids, ethnicity, language, gender, sexual orientation, socio-economic status, and other universal ideologies. We build a community that fosters a climate that is open and welcoming to diverse people, ideas and perspectives.
4 Innovation & Initiative	We value the exploration of opportunities and embrace innovations that improve our communities and ourselves; dedicated to discovery and communication of breakthrough and foundational ideas that lead to positive transformation of the society. Especially, innovative ideas and leveraging high technology to improve the quality of life and accessibility to services in rural communities and villages - such as clean water, rural electrification, and eco-friendly design of homes and other practical solutions.
5 Pride and Passion	We are proud and passionate about what we do and who we are; our brand and heritage. We have a contagious, positive outlook. We give and get deep meaning from our work and our life. We value and nurture the hearts and souls of each other and those we serve. We value, and fiercely protect our reputation.

WHAT MAKES US UNIQUE

OUR POINTS OF DIFFERENCE

1) WORLD CLASS TECHNOCRATS

We are an Institute of Technology and we are benchmarking our institution and our students with the best in the world – the ultimate idealistic goal. We have gone beyond mere rhetoric and aspirations. We are proactive and progressive and are well advanced in accrediting our Engineering programs and will expand and widen the scope of accreditation to other programs as well.

Our ultimate objective is to produce an Ideal graduate, employable in PNG and the entire world.

2) REAL WORLD EXPERIENTIAL LEARNING

The world is undergoing constant and rapid transformation. We are riding the crest wave of new changes in the university teaching (faculty, content, delivery, student interface) and leverage cloud technology and other appropriate mediums to develop more experiential learning. Learning which expands beyond theory and academic postulations but one that blends real world experience. This, in our conviction and belief, prepares our students to transit and assimilate faster in the workplace and in many vocations in the real world.

3) ARDENT APPLICATION OF SCIENCE, TECHNOLOGY & INNOVATION

Universities are the bastions of Science Technology and Innovation. In accord with our Vision of – “Growing World Class Technocrats for the Real World”, we consider the significant role and impact of science, technology and innovation in daily life of Papua New Guineans and humanity-at-large. This dimension encourages new ways of thinking and doing things in various fields such as science and technology, environment, climate change, agriculture, humanities, socio-economic endeavours and many more.

4) STUDENT CENTERED LEARNING ENVIRONMENT

As we transit to student centred and blended learning for the Real World, we are ensuring our learning environment, in particular, our diverse physical locations, culture, context, student amenities, ergonomic study and research facilities, methods of impartation and delivery is in alignment with our Vision. This enables and empowers students to excel in their studies and interface with academia, their fellow students and stakeholders. Through our faculties and curriculum, extra-curricular activities and community building efforts, we prepare our students to be leaders who challenge pre-conceptions and status quo, value difference and catalyse divergent ideas to realize our Vision.

5) ACTIVE COMMUNITY INTERFACE & COLLABORATION

We acknowledge that the PNG University of Technology, on its own, cannot be a sole solution to many of society's challenges. For this reason, we are actively and proactively forging productive and synergistic relationship and collaboration with - community groups, other universities and educational institutions, non-government organizations, private sector, bilateral and multilateral partners. We are engaged in various projects and endeavours that can leverage our knowledge, research, resources and competencies to add intrinsic value to society and humanity.



WORLD CLASS TECHNOCRATS

PNGUoT GRADUATE ATTRIBUTES

The graduate attributes are the academic abilities, personal qualities and skills which should be acquired by all graduates regardless of their discipline. They are acquired as part of our experience.

A PNGUoT graduate is:

1. a lifelong learner
2. a critical thinker
3. an effective communicator
4. a cultural modernist
5. morally upright
6. technologically savvy

Each attribute has an academic dimension, a personal dimension and a transferable dimension. The transferable dimension is about the skills that one can move with from one place of employment to another. We can show these dimensions against the attributes of a World-Class Technocrats in a matrix as follows:

Attribute	Academic Dimension	Personal Dimension	Transferable Dimension
Lifelong learner	Sustained intellectual curiosity and use of feedback to reflect on their own work.	Sets aspirational goals for personal improvement and career growth.	Takes responsibility for one's learning and development.
Critical thinker	Uses rules of inference to analyse complex issues and find solutions.	Calmly uses logic and critical thinking, and not emotion, in all situations.	Ability to find solutions to problems by using logical and imaginative thinking.
Effective communicator	Ability to discuss and debate issues articulately and confidently and convincingly.	Character of producing high quality written essays and oral presentations.	Ability to communicate and negotiate with others and to listen to them.
Cultural modernist	Familiarity with international standards and world cultures and human rights.	Tolerance of the religions and cultures of others.	Ability to work in a multicultural setting and comprehension and tolerance of religious and cultural differences.
Moral uprightness	Understand and act upon the ethical responsibilities of their actions.	Character of acting in a morally upright way in all situations.	Professional behaviour at all times.
Technologically savvy	Familiarity and use of technologies appropriately.	Keeping up to date with innovations.	Character of accepting new technology and quickly adapting to it.



OUR STRATEGIC DOMAINS



STRATEGIC DOMAIN 1

INSTITUTIONAL LEADERSHIP AND GOVERNANCE



GOALS & OBJECTIVES

1. STRENGTHEN AND EMBED INSTITUTIONAL GOVERNANCE

- i. Consolidate, harmonize and realign PNG University of Technology Act and Higher Education Act and other sub-sidiary Act and Regulations.
- ii. Update all Institutional Policies and Prudential Standards.
- iii. Streamline Council and Committees for effective leadership and performance.
- iv. Develop and adopt a structured and coherent framework for the development, attraction, retention and succession of Council members and Senior Management.
- v. Train and Evaluate Council members and Council Secretariat.
- vi. Develop succession plans for Council and Senior Management.

2. STRATEGIC PLAN

- i. Develop and implement Strategic Plan for PNGUoT.
- ii. Develop a performance management systems to operationalize, manage, monitor and track progress and accomplishments of the Strategic Plan.

3. RISK MANAGEMENT

- i. Develop an Institutional Risk Framework for PNGUoT.

STRATEGIC DOMAIN 2

ACADEMIC EXCELLENCE

GOALS & OBJECTIVES

1. CONDUCT DIAGNOSTICS OF THE HIGHER EDUCATION SECTOR IN PAPUA NEW GUINEA.

- i. Prepare scope of work and outsource to competent professionals to undertake comprehensive Higher Education Industry diagnostics and analysis.
- ii. Provide guidance for transformation and streamlining of faculties, curricula and work integrated learning in all courses tailored for the needs and expectations of the real world.



2. PRODUCE EMPLOYABLE GRADUATES

- i. Inculcate and model PNGUoT graduate attributes among all students
- ii. Engineering and science courses will be fully accredited by 2024
- iii. All professional courses will be bench-marked to international standards by 2024.
- iv. 100% subjects must have subject files by 2020.
- v. 100% subjects must be digitally available by 2020.
- vi. 100% faculty must attain PG Certificate in student-centred teaching.

3. LABORATORY FACILITIES AND EQUIPMENT WILL BE UPGRADED

4. DEVELOP A SPECIFIC STRATEGIC FRAMEWORK TOWARDS A CONDUCTIVE AND STUDENT-CENTRED LEARNING ENVIRONMENT

- i. Reliable ICT infrastructure.
- ii. Access to International Library Services.
- iii. Extra curricular activities.
- iv. Soft skills training.
- v. Tutorial and Mentorship programs will be implemented for students.
- vi. Extra Curricular programs will be designed and delivered by Student Services and Facilities to improve students social engagements.

5. REAL WORKPLACE ENTREPRENEURIAL TRAINING & DEVELOPMENT

- i. Enhance activities of the Entrepreneurial Institute.
- ii. Develop patentable products.

STRATEGIC DOMAIN 3

RESEARCH, INNOVATION AND TRAINING

(LEVERAGING THEORETICAL
DEVELOPMENT FOR REAL
BUSINESS PRACTICE
AND NEEDS OF SOCIETY).

GOALS & OBJECTIVES

1. CONDUCT A THOROUGH BASELINE REVIEW AND REPORTING OF THE CURRENT STATE OF RESEARCH AND INNOVATION.

- i. Departments will submit reports on all research undertaken.
- ii. Departments will submit reports on all post graduate research.

2. DEVELOP AN INSTITUTIONAL REGISTER AND INVENTORY OF ALL PATENTS, COPYRIGHT AND NOTARIES ON RESEARCH AND INNOVATION.

3. DEVELOP A ROAD-MAP AND STRATEGIC FRAMEWORK FOR CUTTING EDGE RESEARCH AND INNOVATION AND HOW THIS CAN BE LEVERAGED TO PROVIDE SOLUTIONS FOR SOCIETY AT LARGE.

- i. Departments will submit Research and Development plans.
- ii. Strategise to conduct research relevant to industry and community demand.
- iii. Strengthen research on environment, conservation and climate change.
- iv. ERMIC, Biotech, Melanesian Land Studies Centre and Architectural Heritage Centre will expand and strengthen links with stakeholders for appropriate developments.

4. CAREER DEVELOPMENT FOR MASTERS & PHDs WILL BE COUPLED WITH RESEARCH

- i. Each Department will deliver 3 Masters graduates per year.
- ii. Each Department will deliver 1 PhD graduate every 2 years.
- iii. Each Department will produce 3 indexed publications per year.
- iv. PG Supervisors will be trained in collaboration with partner overseas Universities.
- v. Staff will mentor high-calibre student for academic profession.



STRATEGIC DOMAIN 4

ORGANIZATIONAL EFFECTIVENESS AND PERFORMANCE



GOALS & OBJECTIVES

1. OUR PEOPLE

- i. Develop a strategic institutional leadership and talent framework to attract, retain, develop and grow highly professional and competent academic and administration staff.
- ii. Improve and expand human resource management, systems and processes.
- iii. Realign work-force planning, reward and recognition of excellence with our real-world learning.
- iv. Develop Continuing Professional Development (CPD) framework for our academic technocrats incorporating a wide range of collaborative and individual activities including;
 - working with educational designers,
 - attending workshops,
 - discussing with peers,
 - presenting at conferences,
 - undertaking professional reading.
- v. This will ensure consistent incremental growth in the number of Professors and PhD holders in the teaching staff of the University.
- vi. Inculcate a culture of compliance with institutional core values.

2. STRUCTURES / SYSTEMS / PROCESSES

- i. Continuously review and upgrade systems and processes to deliver world-class technocrats for the real-world.
- ii. Ensure institutional structure is adapted and realigned to support effective implementation and accomplishment of the strategic plan.

3. INFORMATION TECHNOLOGY

- i. Empower University community through technology that will enable;
 - effortless access to data, information and knowledge,
 - effective use of information technology to automate administrative functions,
 - rapid and profound innovation in teaching, learning and research,
 - seamless collaboration across communities and disciplines.
- ii. Review and consider cost-effective alternative and viable information technology resources.
- iii. Develop and install institutional website portal for PNGUoT.
- iv. Review viability of the role and functions of PNGUoT as .pg manager in Papua New Guinea.

4. INSTITUTIONAL SECURITY

- i. Strengthen and enhance existing security and safety programs by tailoring programs to each unique situation and campus setting such as;
 - overall campus security,
 - law enforcement / public safety,
 - emergency management,
 - health services,
 - perimeter fence,
 - video surveillance,
 - security & street lights,
 - legal services.

STRATEGIC DOMAIN 5

ACCESS, EXTERNALISATION AND INFRASTRUCTURE



GOALS & OBJECTIVES

1. INCREASE STUDENT INTAKE BY 15 – 20% PER YEAR FOR THE NEXT 5 YEARS

- i. Submit a 5-year plan to DHERST and DNPM for new student accommodation, staff housing, lecture rooms, staff offices and laboratory facilities.
- ii. Recruit new academic staff for teaching support for increased intake.
- iii. Ensure that scholarships are attracted for Undergraduate and Postgraduate students.

2. EXTERNALISATION (SATELLITE CAMPUSES)

- i. Policy Paper on Satellite Campus Development program will be completed for implementation.
- ii. Provincial Governments will partner with PNGUoT to set up Regional Satellite Campuses.
- iii. Training programs will be guided by skills requirement for Regional economic corridor developments.

3. MAINTAIN ALL INSTITUTIONAL BUILDINGS

- i. Inspect all institutional properties and assets (staff accommodation, office, lecture halls, academic buildings, etc.) incorporating a comprehensive report of each assets (age of property, engineering and architectural soundness of structure, state or condition of property).
- ii. Develop a comprehensive asset register and inventory of the assets including white goods (furniture's and fittings). The asset register is the repository for the asset data and provides the structure within which asset history is recorded which include maintenance, modifications, upgrades, breakdowns, spares replacements as well as performance or productivity information.
- iii. Fully integrate asset register into the asset management and financial systems. This ensures that asset transactions are updated on a real-time basis and that data integrity is maintained between the asset register and the other systems.
- iv. Produce a "project based" maintenance program for staff housing.
- v. Draw up a strategic framework for a 5-year transport fleet and vehicle replacement program to meet demand.

4. COST EFFECTIVE ANALYSIS OF ALL UTILITIES

- i. Review cost effectiveness, economies of scale and utilization of public utilities such as water, power including stand-by generator and solar powered lights, the sewage system, garbage collection and disposal programs.
- ii. Diversify energy and water resources to save cost on utilities.

5. UNI-CITY MASTER PLAN

- i. Uni-City Development Committee to manage a University Master Plan.
- ii. Develop "business case" for University Master Plan as a City within a City. The development is a long-term goal of attaining financial self-sufficiency.



STRATEGIC DOMAIN 6

FINANCIALLY SELF-SUFFICIENT



GOALS & OBJECTIVES

1. PRUDENTIAL FINANCIAL CONTROL

- i. Consolidate internal controls, policies and procedures that protect the assets of the University.
- ii. Create reliable financial reporting, promote compliance with laws and regulations and facilitate effective and efficient operations. It is important to form internal controls for:
 - Handling funds (received and expended).
 - Preparing appropriate and timely financial reporting.
 - Conducting and completing timely annual audits of financial statements.
 - Evaluating Bursary staff and programs.
 - Maintaining inventory records of real and personal property.
 - Implementing personnel and conflict-of-interest policies.
 - Aligning financial resources with the priorities of PNGUoT.

2. STRENGTHEN BILATERAL AND MULTILATERAL SUPPORT.

- i. Ensure effective implementation and deployment of twinning partnerships with overseas Universities.
- ii. Strengthen existing links with EU, FAO, ACIAR and other multilateral partners to support scholarship, research and training.
- iii. Create dialogue with bilateral partners to support engagements in national development programs.

3. LEVERAGE SUPPORT AND COLLABORATION WITH BUSINESSES INCLUDING GOVERNMENT STATUTORY INSTITUTIONS.

- i. Organise Industry Dinners regularly to attract participation in supporting industrial training of students.
- ii. Strengthen links with industry and community through Open Day and Career Fair activities.
- iii. Coordinate Industry participation to support academic Departments in terms of curriculum review and sponsorship.
- iv. Improve small scale business operations i.e Bookshop, Printery, Engineering and Medical Services.
- v. Capture emerging business opportunities i.e Catering and Travel Business

4. LEVERAGE AND GROW EFFECTIVE BUSINESSES.

- i. Strengthen Capacity of Unitech Development Company (UDC) and its subsidiary, National Analytical and Testing Samples Laboratory (NATSL) to streamline and be profitable.
- ii. Review and streamline Rainforest Habitat to ensure it effectively performs its functions as a conservation and nature park, providing preservation and research into local animals and plant species and being a tourism business hub to sustain and maintain its operations.
- iii. Ensure effective marketing and implementation of the business case of PNGUoT Master Plan - City within a City.

STRATEGIC DOMAIN 7

COMMUNITY, INDUSTRY AND INTERNATIONAL RELATIONS

GOALS & OBJECTIVES

1. INTERFACE WITH STAKEHOLDERS

- i. Develop sustainable networks, partnerships, communication media and activities between the University and Communities at local, national, regional and international levels.
- ii. Collaborate with other Universities (both national and international) to develop a sound business case to assist indigenous rural communities in business training, incubation and social, economic and environmental transition.
- iii. SPISARD will be the platform to rollout agricultural development programs to the communities.
- iv. Appropriate Technology and Community Development Institute will expand and be the Technology Transfer Centre rolling out training and development programs for Urban and Rural Communities.
- v. Expand and consolidate the Unitech Alumni network.

2. BRAND MARKETING AND DIFFERENTIATION

- i. Review the iconographic expressions of PNGUoT identity and develop a unique brand to be different from other Universities providing similar practices and products in University Education.
- ii. Public Relations Office will be active in promoting PNGUoT through all media.

3. PARTNERSHIP WITH OVERSEAS UNIVERSITIES

- i. Departments will strengthen links with overseas Universities.
- ii. International relations with Multi and Bilateral Partners will be strengthened.



CONCEPTS

It is important for all those involved as *Transformational Change Leaders and Drivers* and *Implementors of the University of Technology Strategic Plan and Transformation Framework* to understand the concepts and tools used extensively in Strategic Planning and their respective functions and how they inter-relate and inter-play.

The common and universally accepted concepts used in Strategic Planning are;

- Vision,
- Mission,
- Strategic Domains or Goals,
- Objectives,
- Values,
- Points of Difference.

Definitions	How it fits together
Vision – is “A picture of what an institution could be and desires to be.” It is futuristic and typically framed or written to uplift and inspire the Institution and its stakeholders – Council or Board, management at all levels, employees, students and other stakeholders.	The difference - Vision and Mission Statements have different definitions and serve different purposes but interact and inter-play to contribute towards attaining the Vision and Strategic Domains. See primers and comments below;
Mission – is a short and sharp statement that encapsulates an Institution’s “purpose, state of being” and “why it exists”. It ensures the Institution is focussed on what it is good at – the industry it is in, the services and products it offers and the market and customer segments it serves.	The Vision is a loftier world view of the Institution. It condenses a futuristic or metaphorical future which attracts, rallies, and inspires all stakeholders to work in concert and collaboration to attain the future state. It is an evocative description of what is possible. The Mission is a description of the “purpose” and “state of being” of the Institution. It’s nature and scope of business. It helps guide day-to-day operations and enables effective decision making. It provides discipline, boundaries, and keeps the Institution on track and on course in its daily existence as it moves towards attaining its superordinate vision. It is a living statement.

CONCEPTS

Definitions	How it fits together		
Strategic Domain or Goal - is the "mini-purposes" or "bite size" segments that <u>ultimately enables achievements</u> of the purpose captured in the MISSION Statement, and <u>lead to realization</u> or <u>accomplishment</u> of the VISION.	GOALS & OBJECTIVES have different meanings and purpose yet are closely aligned and interact with each other. The DIFFERENCE between Strategic DOMAINS or GOALS and OBJECTIVES is that -		
Strategic Objective - is Specific, Measurable, Actionable, Realistic, Time Bound, Evaluative, and Reviewable (SMARTER) conditions that <u>must be attained</u> in order to <u>accomplish a single or multiple Institutional Domains or Goals</u>.	<table> <tr> <td> STRATEGIC DOMAINS/GOALS are; * Fluid and directional in nature, open and unstructured. * They are ideas or mini-purposes or desired results or outcomes. * They are bidirectional and point to the direction or path where an Institution envisions and commits to achieve. * They are broad, general and based </td><td> OBJECTIVES * Tend to be single achievable outcome. * They are concrete in statement and purpose. * They tend to be single achievable outcome and are concrete in statement and purpose. There is no ambiguity whether they have been achieved or not. </td></tr> </table>	STRATEGIC DOMAINS/GOALS are; * Fluid and directional in nature, open and unstructured. * They are ideas or mini-purposes or desired results or outcomes. * They are bidirectional and point to the direction or path where an Institution envisions and commits to achieve. * They are broad, general and based	OBJECTIVES * Tend to be single achievable outcome. * They are concrete in statement and purpose. * They tend to be single achievable outcome and are concrete in statement and purpose. There is no ambiguity whether they have been achieved or not.
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■ STRATEGIC DOMAINS or GOALS are the <u>description of the DESTINATION</u>, whereas ■ OBJECTIVES, on the one hand, is the <u>measure of the progress</u> that is needed to get to the DESTINATION. ■ Indeed, STRATEGIC DOMAINS or GOALS <u>without OBJECTIVES can never be achieved while OBJECTIVES without STRATEGIC DOMAINS or GOALS will never get the Institution to where it wants to be.</u> ■ The two concepts are <u>related yet separate</u>. ■ <u>Using both</u> can enable you to be and do what you want to do.			

Grow

The word "GROW" is a verb normally used without an object and means to increase by natural development or to form and increase in size by a process, etc. For example, education is an important process of preparing the next generation of leaders and workers, to "grow" them.

In addition the word "GROW" is a common word (grass-roots parlance) which resonates with ordinary people because it has relevance to and for our people and culture in that we all originate from a subsistence agriculture background.

CONCEPTS

Organizational Culture	Organizational culture is a system of shared assumptions, beliefs, values, which governs how people behave in an organization. These shared values have strong influence on the people in the organization and dictate how they dress, act, and perform jobs and interface with other stakeholders and clients.
Key Performance Indicators (KPIs)	A Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively an organization is achieving key business and performance objectives. Organizations use Key Performance Indicators at multiple levels to evaluate their success at reaching or accomplishing targets/goals.
Real World	“REAL WORLD” is a noun phrase which exemplifies the realm of practical or actual experiences, as opposed to the abstract, theoretical, idealized sphere of the classroom, laboratory, etc. It is punctuated by recent University and College graduates looking for jobs in the world of (un)employment. It also means embracing of a teaching module that incorporates more experiential learning and assimilation of job placements, etc.



CONCEPTS

Technocrat

The word **"TECHNOCRAT"** is used in a generic and much wider sense to include students, academics and management. The word **TECHNOCRAT** originated in 1930 and 1935 (world depression) and is derived from the root word of **TECHNOCRACY** which is a theory and movement, prominent in 1932, advocating control of industrial resources, reform of financial institutions, and re-organizations of social system, based on findings of engineers and technologists. It is also (more powerfully) a word which is relevant and resonates with the University of Technology and the various technological courses that our University offer such as: engineering, sciences, mining, agriculture, forestry, architecture, business management, accounting, computer science, etc.

World - Class

The word **"WORLD-CLASS"** is an adjective which means ranking amongst the World's best institutions. It sets a benchmark and a standard to aspire towards.





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