



The State of Durban University of Technology: 2022

05 September 2022

I, hereby, greet all DUT's people, starting with our Chancellor, Ms Nonkululeko Nyembezi, our Chair of Council and members of Council, Executive and Senior Management, staff, students and graduates. I also greet our strategic partners and stakeholders who help to shape the journey towards developing a DUT that is **D**ifferent, **U**pended and **T**ransformed through our efforts at being *Creative. Distinctive. Impactful.* as our new tagline goes.

Like was the case two years ago, we have been unable to deliver the State of the University Address (SOUA) live due to a combination of factors. Chief among them is that the country was still under lockdown for the better part of the first semester. When the University returned to face-to-face engagements as the second semester started, we planned to release this statement around the time of the unveiling of our DNA Double Helix Monument and the launch of our Time Capsule. These events took place on 26 August 2022, just last week.

Management is still duty-bound to report on progress we are making against our 2021 Annual Performance Plan (APP) and our Extended Annual Performance Plan (EAPP), and on what we are grappling with in our academic year 2022. Thus, this statement or report offers us a platform to deepen not only some of our values and principles like transparency, but to demonstrate an integral part of our institutional culture, namely '*shared responsibility and accountability*'.

Just before I provide a synopsis of high-level developments regarding the state of affairs at DUT, let me acknowledge a number of disasters that have befallen our dear province. While we were still grappling with COVID-19 and the devastating effects of the July 2021 uprisings, the April and May floods exacerbated our situation further and plunged our economy into a tailspin, with lots of lives and livelihoods lost. Sadly, we also lost one staff member when her family home collapsed. Many of our people were affected directly or indirectly. Several buildings and equipment got damaged. The estimated repair costs for damages at DUT, mainly at our City Campus and at our Alpine Residence, are estimated at about R13.5 million from the first round of severe flooding.

These realities do not only remind us of a world replete with volatility, uncertainty, complexity and ambiguity (VUCA) but, the fact that '*life is difficult*'. Speaking at the launch of *Innobiz*, our Centre for Entrepreneurship and Innovation, on 4 November 2021, I quoted American Psychiatrist, Dr Morgan Scott Peck, who opens his book, *The Road Less Travelled*, with an assertion that sounds unimaginative and simplistic but, yet intriguing: *Life is difficult*. He then proceeds to expatiate on this expression so that its truism is understood in context.

"Most do not fully see this truth that life is difficult. Instead, they moan more or less incessantly, noisily or subtly, about the enormity of their problems, their burdens, and their difficulties as if life were generally easy, as if life should be easy". He adds, "Life is a series of problems. Do we want to moan about them or solve them? Do we want to teach our children to solve them?"

I reminded all of us of the moral duty and obligation ENVISION2030 imposes on us. As adaptive people, we have to build and demonstrate our acumen to initiate and/or respond to changes in the world, provide solutions to societal problems, and thus, '*contribute towards improving the lives and livelihoods of our broader society*'. In retort to Dr Morgan Scott Peck's statement, I said:

"The idea of higher education is not just about being educated; but about ideation, innovation and entrepreneurship in creating something new that never existed before. Our broader society may moan incessantly and noisily and, thereby, multiply our problems. However, our people at our universities must constitute that microcosm that should not just moan incessantly and noisily; but provide solutions. We must be that microcosm that should not multiply; but eradicate our problems."

With this preface, let me remind you that by now we have a corpus of documents, videos and communiques including my *Iminingo* issues and previous SOUAs that share critical concepts and information about ENVISION2030 and about many other developments at DUT. So, I will not repeat many of the details as I

take you through my account of what we did in 2021 and are doing in 2022 in respect of ENVISION2030's four (4) Perspectives, namely **Stewardship, Systems and Processes, Sustainability** and **Society** and their constituent 12 Strategic Objectives. As you should know by now, the first two Perspectives are, collectively, the 'enabling and effecting' ones while the last two are, collectively, 'influencing and impacting'.

STEWARDSHIP

Lived Values

In 2021, we introduced Phase 2 of our Living Values Project (LVP) and moved closer towards the finalisation of the DUT Living Values (Behaviour) Framework (LV Framework) following workshops we had in 2020 and 2021. This framework provides clearer definitions of what our values and principles really mean. In addition, behaviours expected of all DUT people, namely staff, students, management and committees/structures have been spelt out on the basis of which we could be judged by anyone. For instance, we cannot claim to be a university that embodies professionalism and excellence, amongst others, but continue to have some of our academic staff members essentially refusing to obtain master's degrees, when these are the absolute minimum qualification for any person worth being called an academic in this country. In fact, in many other progressive countries, the minimum is the doctorate! We simply cannot fathom why academics would refuse to increase their capacity to impart top quality knowledge, research and innovation to our students.

We innovated two-fold on the Glasgow Caledonian University (GCU) LV Framework that we used as our exemplar. The DUT LV Framework portrays "I do" and "We are" statements, affirming self-talk to embed a LV mindset and it also stratifies the DUT people five-fold in terms of their role and function. No less than 25 workshops were held with staff and students as part of the development and rollout of the LV Framework across the University.

The year 2022 must see DUT begin to incorporate our LV Framework in many areas, like in the induction of our students and staff, in recruitment and appointments, in relevant policies and procedures, in our 360-degree assessments that are an integral part of our Performance Management Systems (PerMS) and, but also, in our daily practices.

Institutional Culture and *The DUT Way*

Institutional culture is a function of our lived values and principles, habits and behaviours that get embedded in the hearts and souls, thoughts and minds, actions, behaviour and practices of our people until they are second nature. As Pascal Finette's dictum goes: '*people are the source*' of everything we do and equally the source of everything we fail to do. We thus, again as Jim Collins would have, need the right people, in the right seats, doing things right at DUT.

The DUT Way, the outcome of our institutional culture, consists of three elements that are firmly embedded in ENVISION2030. Its first element consists of our DNA with its two strands of '*innovative and entrepreneurial*' and '*people-centred and engaged*' which constitute the most intrinsic and irreducible elements of our being as DUT people. Secondly, at the most extrinsic level, the behaviours in our LV Framework are what we must see irradiating in action, behaviour and practice from every DUT person. Thirdly, a culture of '*shared responsibility and accountability*' will help us all to interweave our systems and processes, our commitment to sustainability, and our obligations to our broader society. It's *The DUT Way* that will shepherd us towards a **D**ifferent, **U**pended and **T**ransformed DUT, through our unique and collective nature of being *Creative. Distinctive. Impactful.*

There remain several insidious sub-cultures and pandemics in some of our people. Among some of our students, the sub-culture and pandemic of threats and intimidation, violence and arson make us un-university like. The sub-culture and pandemic of anti-learning and anti-intellectualism that makes our students only focus on getting qualifications with less and less immersion in knowledge acquisition cannot possibly produce a university graduate worth the name. Among some of our staff, a sub-culture and pandemic of earning a living by whatever means necessary cannot engender integrity, professionalism and excellence, just to mention a

few. The list is long. All of these are inimical to *The DUT Way* I have just summarised in the preceding paragraph. These sub-cultures and pandemics betray the very essence of a university as a place of learning, creativity and innovation, intellectual immersion and excellence, facts and evidence, reason and deliberation.

Our work is cut out in 2022 in this respect. Without any prevarication, we must embed, even more deeply, all of the three elements of *The DUT Way*. We must eschew all these sub-cultures and pandemics in our midst and throw them into the dustbin of history.

Creativity

As mentioned above, one of the two strands of DUT's DNA is being '*innovative and entrepreneurial*'. The source of these two elements is creativity. The concept of creativity, and in turn, the ethos of innovation and entrepreneurship, are what we worked hard in 2020 and in 2021 to foster in various ways.

As you will discover later under the sections focusing on '*innovative curricula and research*', '*distinctive education*' and under '*Society*', DUT's philosophy of education is revolutionary. It is a philosophy that upends the now-hackneyed and moribund mantra of universities of technology '*educating and training for the workplace*' into one that makes DUT and its people creators of workplaces through research, innovation and entrepreneurship.

Indeed, as we are beginning to say in the process of introducing our new statement of philosophy of education at DUT: "*Our creativity and innovation shapes adaptive graduates that transform society."* Every DUT person, especially our students and academics, will, henceforth, have to fully understand what this means and demonstrate that our academic programmes align with it. During 2022, we will provide a one-pager that expatiates on the set of three pairs of words in the statement above, namely '*creativity and innovation*', '*adaptive graduates*' and '*transform society*'. When understood properly, these three pairs of words will propel DUT to greater heights on this exciting and revolutionary academic journey.

In the section below on '*innovative curricula and research*', you will learn more about the foundation we are building to foster creativity as the foundation of innovation and entrepreneurship.

Undoubtedly, the paragraphs above clearly prove that DUT is on a path to a new philosophy of education, undergirded by PBL and DT. Together with our quad-helix partners – in government and its agencies, in business and industry and in other organs of society – we have funded several research, innovation and entrepreneurship projects that align with our new philosophy of education. The last section under '*Society*' provides details of outcomes and impacts of these projects.

SYSTEMS AND PROCESSES

'*Systems and Processes*' is the second of our '*enabling and effecting*' Perspectives. While ENVISION2030 only contains three Strategic Objectives under this Perspective, it is important to alert you to the fact that there are many other systems and processes that keep DUT intact. For instance, during 2021, Management drafted and recommended to Council for approval a number of policies that drive our systems in new, unique and innovative ways.

Before I deal with our strategic objectives under this Perspective, let me share a few important developments in the areas of institutional planning, monitoring and evaluation, and in our organizational review. The two are part of our integral cogs in the implementation our broader systems.

Institutional Planning, Monitoring and Evaluation (IPME)

Peter Drucker, the late Austrian-American professor, author and management expert says: "*Leadership is doing the right things. Management is doing things right."*

As you are all aware, ENVISION2030 is IPME's creative, innovative, sterling and seminal product. Planning gave us the right things to do. As 2021 began and right into 2022, we are focusing on doing things right. In short, we are building models and mechanisms for the implementation, monitoring and evaluation of what we call ENVISION2030's 'Big Rocks and Flagships'.

Since the completion of DUT Scenarios 2040 in November 2021, and being adaptive people that we are, we have continued to incorporate new developments within the VUCA world. Unlike many South African institutions or organisations that have wonderful plans that beg implementation in vain, DUT refuses to just have a plan and not implement it. We refuse to fail to do things right. We refuse to lead but fail to manage.

After some intellectually sapping attempts in 2020 to produce our Strategic Plan 2030 over and above the Strategy, Council eventually approved it on 4 December 2021. It has three implementation phases and periods, namely the *Different: 2020-2023*, the *Upended: 2024-2026* and the *Transformed: 2027- 2030* periods. IPME's focus has, as of the beginning of the year 2022 of the first period, turned towards monitoring and evaluating our performance in implementing our plans.

In this respect, we have in place five (5) supportive governance and management frameworks that will facilitate implementation, monitoring and evaluation, namely our *Extended Annual Performance Plan (EAPP)*, our fully automated *Strategy Tracker*, our *Monitoring, Evaluation and Learning (MEL) Framework*, and our *Strategic Budgeting Policy* and our multi-year *Strategic Budget 2030 Forecast*. In addition, there are three (3) operational mechanisms emanating from what we called on 18 November 2016 at the then Council workshop, 'the confluence of planning, budgeting and risk management'. They are, namely the 'Big Rocks/Flagships' which identify our broad strategic fields of implementation together with flagship projects within them, the *Strategic Budget 2030*, and our *Resources Allocation Model (RAM)*), all of which align funding and allocation thereof accordingly.

During 2022, we will identify some of our people with the right values and principles, commitment and enthusiasm, and with the knowledge and acumen to assist the entire University in the implementation of our 'Big Rocks/Flagships', regardless of their positions in the University's hierarchy.

Organisational Review: re-alignment and performance

In a sense, the last paragraph above signals how prepared we are to innovate, facilitate implementation and demonstrate to South Africa that we have the acumen to plan and implement, or, alternatively, to do the right things and do them right. In short, to lead and manage.

At its meetings of 4 December 2021 and 26 March 2022, Council approved five (5) new and reviewed structures in the fields of Finance, Human Capital Services (HCS), Information Communication Technology Services (ICTS), Real Estate and IPME. This is essentially Phase 1 of our organisational review project. Work has been ongoing since then to finalise job profiles and gradings, develop transparent and fair implementation of principles and procedures, and consult with our Unions on all of these. In fact, some of the positions have been advertised and should be filled by the end of 2022.

We still have a long road to re-align all our structures to the demands of ENVISION2030 and its implementation plan. Phase 2 will involve several support services and academic structures we will review and re-capacitate starting from 2022 and going beyond. As we do this we have to ensure that the majority of our resources support our core business more than our support services.

Being able to implement our 'Big Rocks and Flagships' does not just end with new functions and structures. It also suggests we must have a mature performance management system (PerMS) to ensure these new functions and structures are fit for purpose. Despite initial inertia, advances have been made over the last three (3) years with respect to implementing it. Contrary to some narratives that seek to undermine this system, it is really all about ensuring that as we plan and implement, we do the right things and do them right,

that we lead and manage. It is also about ensuring that we have the right people in the right seats, doing their jobs right. And, when there is evidence that some of our people require capacity building without which our sense of *'shared responsibility and accountability'* would be compromised, we could help to capacitate and develop them. In this context, rewards that the University may afford would not be the focus, but just the cherry on top.

Innovative curricula and research

As noted above under the section on *'Creativity'*, DUT is changing its philosophy of education to one that focuses on creativity, innovation and entrepreneurship. In this respect, Divergent and Design Thinking (DT) will be fostered through the Universal Design Learning (UDL) framework, which provides a firm basis for teaching-learning approaches like Project Based Learning (PBL), Problem Based Learning, and Design Thinking. By the end of this year, we will have adopted our philosophy of education statement that emanates from ENVISION2030. Preliminary work has started already to design curricula that align with this philosophy.

To prepare our academics for the revolution I intimate above, in 2021 we targeted 150 staff to be trained in Project Based Learning (PBL) and Design Thinking (DT). COVID-19 had a big impact on delivering on PBL and DT learning methods. Despite this, we had approximately 400 academics attending information sessions from the time the project started but 72 academics in total trained in PBL and Design Thinking (DT). We also engaged the Hasso Plattner d-School for 35 academics to receive intensive training in DT. More capacity building is required to ensure that a critical mass of our academics is exposed and uses these approaches as a norm rather than an exception.

As we change our philosophy and approach, we must not be over-optimistic and think we will turn all DUT students into innovators and entrepreneurs. Neither do we expect all our academics to develop overnight into facilitators of innovation and entrepreneurship. Far from it.

Firstly, at least at their start during the **D**ifferent and **U**pend periods of ENVISION2030, the programmes we will design will be select and boutique ones. We will admit only a carefully selected manageable group that, amongst others, will qualify based on demonstrable attitude, mindset and acumen to be innovators and entrepreneurs. For the rest of our students, the changing teaching-learning approach will, at the very least, broaden their horizons. It will also nudge them closer towards innovative and entrepreneurial thinking, which will make them, at the least, intrapreneurs within their workplaces.

Secondly, the idea around *'innovative curricula and research'* is that our students must be equipped with inquiring and inquisitive minds from the earliest stages of their education at DUT. Otherwise, creativity, innovation and entrepreneurship would have no basis and would thus be implausible, if not impossible. As we upend our philosophy of education, the UDL framework must also instill research-based approaches that foster creativity, innovation and entrepreneurship. Even further down the value chain, we will ensure we exploit these traits *'to contribute towards improving the lives and livelihoods of our broader society'* and to help to *'transform societies and their economies'*.

Our work going forward in the current and the next period of implementation of our strategy is clear in terms of teaching and learning and in terms of creativity, research, innovation and entrepreneurship. We will not fail to make our people, especially our graduates, adaptive to a world that keeps changing constantly.

Digital Environment

It is common cause that every positive development in life contains within it a latent negative, and vice-versa. Ironically, COVID-19 devastated our lives and livelihoods on the one hand; and, on the other hand, accelerated other progressive aspects of our lives. While we were forced to accelerate the use of online learning systems, we woke up to the reality of the compromised quality and integrity of online assessments.

Some of our students betrayed our fundamental values and principles such as honesty, integrity and

excellence. The mercurial rise in pass rates experienced in 2020 and 2021 relative to previous years, is not so enigmatic. This was not only unique to DUT, but it became a new phenomenon across the sector. Evidently, online assessments are susceptible to academic dishonesty of all types, just to put it mildly. So many academic cheating businesses have mushroomed around the world and are being used heavily. In turn, this sorry development compromises the quality and integrity of not only our assessments, but our academic programmes, too.

Academic programmes are our only products as a university on which hang our reputation, sustainability and posterity, including that of our country. We investigated options of, and procured some, software we could use to safeguard the integrity of online assessments. However, such software will not be a panacea or a magic wand. The sooner we return to properly invigilated face-to-face assessments and learning, the better. ICTS, with the help of a service provider upgraded our WiFi network across our campuses and residences during most of 2021 and early this year. For this reason and with our return to our campuses, we stopped spending millions each month on data provision for our students and staff.

There is another important reason for us to seriously consider return to face-to-face teaching and learning. Imagine a student who has been enrolled since 2020 as a first-year student, who has hardly ever seen a lecture hall, an examination hall, and has no idea of academic engagement with the lecturers and fellow students. University education is not only about its mechanical aspects, but socialisation, too, so that mindsets and behaviours are moulded accordingly.

We finalised the procurement of our new Enterprise Resource Platform (ERP) after many delays and started its implementation on 1 April 2022. Many of our staff members have already participated in the workshops aimed at ensuring that we build a 21st century ERP. While the ERP has the potential to solve many of our archaic and current problems, the onus is on our people who must contribute towards not only designing the system, but must operate it and make it effective. Without the commitment and the required skills, the system will not realise its full potential and there will not be value for the millions of rands we have spent in procuring it. Change management will be a key focus. The first four modules of the ERP that are being implemented are scheduled to go live in April 2023. We will continue to implement more modules so we could have a more comprehensive digitalised system.

We will not tolerate any resistance to change and departure from old and inefficient systems and practices that made us sub-optimal in providing services to our staff, students and stakeholders. Those who hanker after whatever past or are failing to catch up as we rocket to greatness may well go to the buses we left behind long ago.

State-of-the-art infrastructure

The framework for DUT's infrastructure development is the Long-Term Spatial Plan 2020-2040 (LTSP) approved by Council in 2019 and submitted to DHET thereafter. The concept of state-of-the-art infrastructure involves, amongst others, creating learning, working and living spaces that are interactive, dynamic, shared and that foster collaboration. It is also about ensuring that existing infrastructure is renovated and remodelled accordingly.

Our infrastructure development programme at Steve Biko (Student Services) and Indumiso (Engineering) has proceeded, albeit with challenges of performance involving the main contractor, the principal agent and to some extent ourselves. While we built capacity within our Project Management Office (PMO) to ensure that problems of this nature are dealt with expeditiously, the fact is that it has been mostly temporary and inadequate. I am glad to report that our new Senior Director: Real Estate joined us on 15 August 2022, following a protracted process of recruitment.

As part of implementing DUT's LTSP, several old facilities and buildings have been renovated. DUT is already looking and feeling **Different**. The other major aspects of Phase I of the new infrastructure are moving towards construction and are scheduled for completion in 2024. These involve the Innovation Hub, a new

Health Sciences Building and an Administration Building that will help to consolidate management and administration and provide state-of-the-art Senate and Council Chambers.

With the passage of time since June 2019 when Council agreed on Phase I, some cost adjustments have been determined after a detailed design process. A Managing Contractor has also been appointed and took over the site of construction on 1 September 2022. This will see the demolition of small old buildings like Milena, Berea Court and Tromso near Gate 1 of Steve Biko campus to make space for the new Administration Building.

The refurbishment of university-owned residences, mostly those based in Durban, is complete. More funds have been allocated to refurbish Indumiso-based ones. We are at the final stages of concluding our Public Private Partnership (PPP) procurement process that will see at least 10 000 beds being provided in the next 36 to 48 months through a partnership that involves DHET, DUT and the private sector. This will go a long way to ensure we provide more top-quality accommodation for our students. Currently, we are at the mercy of landlords, including some unscrupulous ones, who collude with some staff and students alike and defraud our students and the university in so many devious ways.

Despite all these initiatives, namely refurbishing our residences and increasing top-quality student bed capacity, opportunists and demagogues who thrive on a DUT that must be perpetually on strike will continue to seek avenues to destabilise us and compromise our education. Nefarious practices abound in the security industry. The old covert practices of using small groups of rowdy students and anarchists who are in payrolls of some companies and individuals to cause mayhem is back at play. The forlorn hope is to force the university to make unreasonable concessions including spending millions on the so-called 'strike force' and on bouncers. Improvement of our security systems remains one of the biggest challenges we face. Our new Deputy Vice-Chancellor: People and Operations is determined to ensure we implement IT-based security systems without further delays.

SUSTAINABILITY

The quest for our goal of '*contributing towards improving the lives and livelihoods*' of our people in the broader society through '*transforming societies and their economies*' starts with commitment to build a sustainable and a resilient university. We subscribe to the Brundtland definition of sustainability as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". It is essentially about the triple-E bottom line of **E**quity, **E**conomy and **E**cology, represented in ENVISION2030 by our three strategic objectives, respectively, under this Perspective.

Distinctive Education

Distinctive Education is the first of the three Strategic Objectives under the Sustainability Perspective, which in turn is one of our '*influencing and impacting*' Perspectives. It is closely linked to a number of other strategic objectives like '*creativity*', '*innovative curricula and research*' and '*state-of-the-art infrastructure*'. Unlike these, it is about '*creating a compelling and a future-oriented living and learning environment*' that will make DUT the first choice for many parents, funders and students. Thus, all the initiatives reported earlier contribute to DUT's '*distinctive education*'.

Let me just add a few more elements of a '*distinctive education*' that is holistic, too. We previously reported that we successfully secured a second grant for a project we call *Siyaphumelela 2.0*, from the Kresge Foundation. This project supports our efforts aimed at increasing student success and improve student experience at DUT. To this effect, two sub-projects were launched last year, namely *Holistic Student Support* and *Building a Data Culture*. In February 2022, the third leg of the grant called *Moving the Middle* was also launched. The *Moving the Middle* project focuses on understanding the multiple challenges that impact on student success and that create a large middle cohort that remains in transition in academic programmes for longer than scheduled. The Vuna Leadership Academy (Vuna-La), which was launched in 2021 became operational almost immediately. It is aimed at promoting self-development and active citizenship among our

student leaders. In its second year this year, the Hlomisa Programme puts special focus on senior students and young alumni that show both academic and leadership potential. It supports them to become fully-fledged and well-rounded leaders that will not just do the right things but will do them right.

We continue to implement several home-grown programmes that target both our staff and students for holistic development within the context of the 'Grow-Our-Own-Timber' (GOOT) framework that we developed in 2018. Starting in June 2022, we are implementing some strategic capacity building programmes that augment those already supported and funded by DHET like the University Capacity Development Grant (UCDG), the New Generation of Academics Programme (n-GAP), and the Nurturing Emerging Scholars Programme (NESP). These programmes are about identifying younger people and readying them for impactful future roles in teaching and learning and research and innovation as well as in management and administration. In the latter area, the focus is on the most fundamental level of our core business, the academic department and its leadership and management. A four months' programme for academic heads of department was launched and facilitated by the Vice-Chancellor and Principal on 3 May 2022.

Financial Sustainability

Financial sustainability risks have been mounting over the past decade or so, particularly since the South African economy never fully recovered from the severe impact of 2008 global meltdown. The current realities of COVID-19 pandemic and the rolling load-shedding implemented by ESKOM have exacerbated our country's woes, forcing us to review our budgets and financial positions. Since the advent of the DHET Bursary System that is part of NSFAS and the advent of COVID-19 in 2018 and 2020, respectively, government funding to universities has been re-prioritised to support the NSFAS system given the commitment that no student must be left behind. Invariably, this reprioritisation affects both block and earmarked grants that are about providing capacity - human and otherwise - for the enrolled students to receive top quality education.

Most of the financial ratios and financial management principles/parameters our Council has put in place over the last few years show that DUT's financial position is a healthy one despite reductions in block and earmarked grants we have witnessed as noted just above. The cost of doing our business will certainly rise sharply again as we have returned to the University physically with effect from the second semester of 2022.

We have, so far, continued to maintain a positive cash balance due to Council's policy of preserving on an annual basis at least seven months of working capital and investing unencumbered cash at favourable interest rates that yield higher investment income on maturity. We have also embarked on a process to determine our financial management maturity level to ensure we could make improvements on it into the future. To this effect, various finance policies and procedures were reviewed and approved in 2021 and earlier this year.

In addition to the mechanisms mentioned just above, we have in place several frameworks, mechanisms and other initiatives that already show we are on track towards improving our financial management maturity. Under the section on 'Systems and Processes' above, we provide more information on these. We are certainly on course to greatness in this regard with only this country's fiscal position remaining our biggest risk.

Green Ecosystems

One of the ways in which we could '*contribute towards improving the lives and livelihoods of the broader society*' is by contributing towards environmental sustainability. The experience of remote working, which resulted in significantly reduced numbers of people on our campuses, led to huge savings on water and electricity. Our drive for the digitalisation of our systems has also resulted in less usage and reliance on paper.

On the strength of, and expertise in, our Technology Station, we are currently conducting a solar feasibility study that involves three sub-projects. Firstly, the viability of DUT procuring a solar manufacturing plant given the opportunity of such a plant being available in Pietermaritzburg. Secondly, we are in the final stages of procurement processes for the design and installation of a 230kw carport system. Lastly, we are almost ready with the design and installation of a 47kw solar photovoltaic system on S-Block at the Steve Biko Campus.

Our Institute for Water and Wastewater Technology (IWWT) continues to blaze the trail and lead the world in so many respects in relation to this increasingly scarce resource in Sub-Saharan Africa.

DUT recently participated in a Carbon Literacy for Green Innovation and Entrepreneurship Dialogue Forum. This project sets to investigate how a Sub-Saharan Africa-contextualised Carbon Literacy Tool Kit (CLTK) integrated solution to Climate Change (CC) could be leveraged for Youth Employability and Job Creation (CL4YEJC) in our specific context as a region. There are several initiatives that are planned in this regard, with DUT being an active participant. Further, Student Housing runs a One-Residence-One-Garden (OROG) project which is a student-led initiative coordinated by the Green Campus Initiative (GCI). Students come up with innovative ideas on how to establish gardens not bound by space, in both DUT-owned and out-sourced residences by collaborating with our Department of Horticulture. The GCI also runs cleaning campaigns and promotes energy-saving and water-saving mechanisms.

SOCIETY

Everything we have presented above has its goal being to ‘contribute towards improving the lives and livelihoods of our broader society’. This Perspective is simply about what DUT bequeaths to society and what impact it makes.

Engaged University

Our framework for engagement with the broader society is predicated on local, regional, national and global imperatives, mostly emanating from the UN’s Sustainable Development Goals (SDGs), Africa’s Agenda 2063, South Africa’s National Development Plan (NDP) 2030, the KwaZulu-Natal Provincial Growth and Development Strategy and a number of strategies and initiatives at local government level.

Demonstrating how we keep engaged and making impact, we continue to win awards in innovation and entrepreneurship regionally, nationally and internationally. These are not accidental. Huge investments have been made in this field. The awards are some of the ‘transient impacts’ on our ENVISION2030 journey as we make DUT **D**ifferent.

Focusing on the international front, as announced in September 2021 by the *Times Higher Education World University Rankings*, DUT has kept its top 500 position in the world and its 5th place nationally. We are placed 12th in the world on citations.

We have continued our participation in the *Impact Ranking* exercise conducted by the *Times Higher Education World University Rankings* having started in 2020. For the second year in a row, DUT was again placed 5th among our national universities for the year 2022. The areas where the University is contributing to and is being assessed on include the following Sustainable Development Goals (SDGs): SDG 1 (No poverty); SDG 3 (Good health and wellbeing); SDG 6 (Clean water and sanitation) and SDG 17 (Partnerships for the Goals).

The VUCA space we operate in has ‘glocal’ features. This means we focus on making impact locally, but in the context of global realities that impact our operations. Therefore, we are fully aware that our ‘*innovative curricula and research*’ must infuse both local and global realities while producing novel knowledge that benefits the local-global (glocal) continuum. It is against this background that we launched and implemented Collaborative Online International Learning (COIL) programmes comprising 15 learning projects across our university, thus earning us a prestigious award from the Association of International Education of Administration (AIEA) in 2021.

Focusing on our impact nationally, our students scooped first prize at the *2021 Youth Innovation Challenge* in November 2021. On 19 November 2021, our Deputy Vice-Chancellor: Research, Innovation and Engagement was awarded the *Entrepreneurship Development in Higher Education (EDHE) DVC Award* for DUT’s efforts at providing significant support to student entrepreneurship among South Africa’s public universities. It was also announced at the event that DUT’s model of entrepreneurship will be implemented at 10 other South African

universities in 2022. Again, all these talk to considerable impact not only in our locality and region, but across the country.

In July 2021, we established the DUT Business School by introducing the Master of Business Administration (MBA) programme and other associated executive management development programmes. It was formally launched on 24 August 2022. This is a bold move in a sector where there are many nationally and internationally acclaimed business schools. We believe there is a niche for an MBA and executive programmes that will take highly accomplished graduates of universities of technology, and others from other universities of course, further in the development of their management skills predicated on our new philosophy of education embedded in creativity, innovation and entrepreneurship. We made considerable progress in getting accreditation nationally and internationally for many of our new programmes. Later this year, we will participate in the MBA Review Exercise conducted by the Council on Higher Education (CHE). CHE has expressed concerns regarding the quality of some MBA programmes in the country. We will participate in the review exercise exuding confidence in knowing that we have complied with all the quality assurance requirements.

Consistent with our commitment to excellence as one of the principles we hold dear, DUT made history by having its first DHET Accredited journal titled “*African Journal of Inter/Multidisciplinary Studies*”, listed accordingly. The journal will help to increase DUT’s impact as it will reach both national and international authors largely to ensure its credibility is upheld. Journals are one form of sharing new knowledge, results and applications. Whilst most traditional universities have one or more journals appearing on the DHET list, this is not common for universities of technology. Again, this is one of the measures that demonstrate DUT’s leadership in the university of technology sector.

DUT is not only engaging deeply with the broader society through its research, innovations and entrepreneurship, but it is also increasing its tempo in terms of social entrepreneurship. Our Urban Futures Centre was awarded the inaugural team award in the 2020/21 HSRC-USAF Medal in Social Sciences and Humanities even though we have no established faculty structure in this broad field. This award shows the phenomenal work related to COVID-19 that the team has been engaged in with the homeless and drug addicts. Our IWWT mentioned earlier has also made some seminal discoveries relating to the spread of COVID-19 through its wastewater research. The Gender Justice, Health and Human Development Focus has been successfully awarded the (Gender Responsive Resilience and Intersectionality in Practice) GRRIPP Award as part of a UK network of universities led by the University College, London.

DUT was previously awarded the Chair: Wholesale and Retail SETA (WRSETA) from 2017-2020. The Advisory Board met in March 2021 and recognized the amount of work done in this area. Additional and significant funding has been granted to carry out the mandate of the WRSETA Chair for the second phase of the Chair from 2021-2023.

Conferences and public webinars in several topical matters have been arranged by various units and centres at DUT. For example, two conferences in September and November 2021 on risk, forensics and auditing; webinars on the July uprising, looting and destruction of public and economic infrastructure; webinars by the Vuna Leadership Academy for student leadership and by the Hlomisa Leadership Academy; the DUT Dialogue Series; and many others. We have also seen an increased number of our staff members and students writing opinion pieces and conducting television and radio interviews on several topical issues, thus profiling the DUT brand in the realm of the battle of ideas and thought leadership.

Innovative and Entrepreneurial

As argued above, ‘*Creativity*’ is the bedrock for innovation and entrepreneurship. Taking advantage of the natural endowment of the human brain, therefore consciousness, we encourage DUT people to harness their innate creative capability, guided by our lived values and principles, to innovate and provide solutions that do not narrowly advance personal careers, but that ‘*transform societies and economies*’ fundamentally.

Part of what we committed to do in our EAPP 2021 to foster innovation and entrepreneurship was the creation of “*space to develop entrepreneurial thinking in curriculum and practice*”. Innobiz is, but one of the structures housing all our projects and activities in this regard, including our entrepreneurship desks in Durban and in the Midlands. As noted earlier, we launched this centre on 4 November 2021. It is our major interface with the broader society on innovation and entrepreneurship.

With the support from various national and international Quad-Helix partners, too many to mention, 4 940 students were trained on entrepreneurship; 160 start-up businesses were in incubation; 52 operational student SMMEs set up and are running, the latter accumulating a consolidated turnover of R1.5 million. About 527 community members were trained, 35 community gardens were established and supported, with our community/clients generating about R34 million in revenue. About 55 direct jobs and 173 indirect jobs were created in all of these.

How many of us remember what I said in my 27 and 28 February 2019 SOUA, delivered at the Steve Biko Campus and Indumiso Campus, respectively? Then, I intimated that:

“I do not think that the annual target of 15 graduate entrepreneurs is too much. With the requisite capacity and willingness, it should be easy to achieve.”

If you did not believe nor realise then that this was a firm DUT policy statement I was hellbent on committing all of us to achieve, you will remain stupefied by your incredulity. DUT does not only talk about impact and about achieving our goal of ‘*contributing towards improving the lives and livelihoods of our broader society*’. We do it and beyond our own expectations. As reported above, we did not have just 15 individual entrepreneurs in 2021, but a litany of achievements in establishing start-ups and SMMEs and contributing to direct and indirect jobs.

We achieved all the above even before introducing new programmes we are still working on as noted earlier, designed to produce innovators and entrepreneurs by design and not by default. During 2021, our teaching-learning and our research-innovation teams started to work tirelessly on such programmes. We trust that starting in 2022, all the competent authorities like DHET and CHE will allow DUT to blaze the trail on such programmes. Clearly, moving forward, it will not be 15 graduates, it will not be 52 students SMMEs, but DUT’s DNA strand: ‘*innovative and entrepreneurial*’ will permeate our localities, our region, this country and the world.

Adaptive Graduates

We define a DUT ‘*adaptive graduate*’ as one that has ‘*the acumen to initiate and/or respond to changes*’ in the world using their innovative and entrepreneurial flair that lies deep in their DNA as DUT people. Thus, all our efforts are aimed at ensuring that DUT students – ultimately our graduates – do not moan incessantly about perennial and novel problems, but that they work to provide solutions to them.

DUT is committed to producing adaptive graduates by design. Under three sections above on, particularly, ‘*Creativity*’, ‘*Innovative curricula and research*’ and ‘*Distinctive Education*’, we explained not only our new philosophy of education, but various mechanisms that support its implementation and embedding deep in our hearts and souls, in our thoughts and minds, and in our actions, behaviours and practices. We are on course to continue to build capacity among our students and staff, while producing these unique DUT graduates. They will be imbued with a sense of self-agency and self-bureaucracy we are all capable of, and thereby ‘*contribute towards improving the lives and livelihoods of the broader society*’.

CONCLUSION

Our national economy is degenerative. Our society is largely an anti-thesis of the values and principles we espouse. Evidently, we have set for ourselves an unenviable task of ‘*transforming economies and societies*’. To achieve this goal will be no menial task. We are determined to educate our adaptive students and graduates

to transcend the zeitgeist in our country that suggests life is about meagre survival by whatever means necessary. As evidenced throughout this document, everything we do reminds us, as DUT people, that all awakened people have within themselves the power to challenge themselves and thereby change the course of their lives and those of their people and environment.

Left with just over 7 years to achieve the bold aspirations we have set for ourselves; we have entered an interesting phase in the life of ENVISION2030. We have now changed gear from the foundational phase of strategy development into the phase of implementation and creating tangible reality that everyone inside and outside DUT could see, feel and experience.

As noted earlier, and for purposes of implementation, ENVISION2030's 10-year horizon has been segmented into three distinct but interdependent phases, namely the **D**ifferent: 2020-2023, the **U**pended: 2024-2026 and the **T**ransformed: 2027-2030. During the current phase, our focus is on embedding our values and principles, on ensuring we abide by *The DUT Way*, on building and refining our systems and processes, and on building our state-of-the-art infrastructure. The launch of the DNA Double Helix Monument and the Time Capsule at our Durban and Midlands Campuses on 26 August 2022, as noted above, is part and parcel of creating living spaces of reflection should we find ourselves straying away from *The DUT Way*.

The second phase must see us being **U**pended, with no point of return to the past. It is characterised by our people and structures living and demonstrating *The DUT Way* as if it were second nature. It is during this phase that our behavior, actions and practices must tell a story more than our words. We must also begin to see sustainable outcomes and impacts of our new philosophy of education, sustainable outcomes and impacts of innovation and entrepreneurship beyond the transient ones we are already witnessing.

The last phase of a **T**ransformed DUT must be a phase during which we celebrate a new DUT that had never been imagined before, a DUT we could truly say will have contributed in '*transforming our societies and their economies*', a DUT that will have made tangible '*contributions towards improving the lives and livelihoods of our broader society*'.

Without doubt, with the right people in the right seats, with ENVISION2030 having helped us to do the right things and do them right, and with not just determined leadership, but pragmatic management and administration, too, our spacecraft to greatness in uncharted territories will have landed.

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