

KEYNOTE ADDRESS BY MS LEONIE DUNN, THE DEPUTY GOVERNOR OF THE BANK OF NAMIBIA, AT THE LAUNCH OF THE BANK OF NAMIBIA ARTIFICIAL INTELLIGENCE AND ROBOTICS ACCELERATOR, TUESDAY, 05 OCTOBER 2024, NUST.

Vice-Chancellor of the Namibia University of Science and Technology, Mr Eroid Naomab
Acting Deputy-Vice Chancellor for Research, Innovation and Partnerships, Dr. Colin Stanley
Distinguished members of faculties,
Members of the Media,
Colleagues from the Bank of Namibia,
Esteemed students,
Distinguished guests,
Master of Ceremonies,
Ladies, and gentlemen

Good Afternoon

- 1. It remains a most humble privilege to address you today, in celebration of the launch of the Bank of Namibia Artificial Intelligence and Robotics Accelerator.**

This event marks a significant step forward in our shared journey towards transforming Namibia into an industrialised, inclusive, and resilient economy, well prepared to accommodate and deliver on future demands.

- 2. Immense appreciation is bestowed on our Governor, Mr Johannes !Gawaxab** for his visionary leadership and strategic foresight in ensuring that we leave no stone unturned in ensuring a digital fit-for-future workforce, a digital fit-for-future public infrastructure, digital-fit-for-future organizations and a digital fit-for-future society. Governor !Gawaxab's continuous reminder is that we all have a collective role to play, in building a prosperous Namibia which enables the prosperity of all Namibians. His deep passion for education, societal upliftment and deploying critical developmental blocks today, to ensure a future we all can thrive in, remains most admirable. It is this very passion and visionary foresight that brought us to where we are today.

3. **The establishment of this facility is the result of a powerful collaboration between the Bank of Namibia and the Namibia University of Science and Technology.** This partnership aligns with our mutual commitment to creating innovative educational and economic opportunities that will drive our nation forward.
4. **This Facility embodies the Bank's vision of positioning Namibia as a global player in technology and innovation, equipped with a workforce that is future-proof and ready to deliver to the ask of a future-world.** Together, we are not only inaugurating a physical laboratory but also opening a gateway to new possibilities, ones that will shape careers, communities, our economy and the very fabric of our society.
5. **This Facility is designed to provide hands-on experience on Key Emerging and Emerged Technologies such as:**
 - **5G&Beyond** offering significantly faster data speeds and lower latency (delay) than previous generations, and handling much larger number of connected devices simultaneously, crucial for supporting the growth of the Internet of Things (IoT) and smart city initiatives;
 - **Quantum Computing** where quantum computers use qubits and superposition to solve complex problems that are currently intractable for classical computers;
 - **the Internet of Things** where a network of physical devices, vehicles, home appliances, and other objects are embedded with sensors, software, and connectivity, enabling these objects to collect and exchange data;
 - **Blockchain** to ensure data integrity, where deployment of a decentralized, distributed digital ledger technology securely records transactions and tracks assets in a transparent and immutable manner, operating on a network of computers (nodes);
 - **Cloud Technologies** enabling convenient, on-demand network access to a shared pool of configurable computing resources;
 - **the Various components of Artificial Intelligence** to simulate human intelligence, such as machine learning, deep learning, neural networks, which enables machines to analyse massive amounts of data, identify patterns, and make predictions or decisions with increasing accuracy and speed; and
 - others such as Virtual Reality; Metaverse; Robotics and Automation; Big Data; and Mobile Phones,

and how to bridge challenges brought about by the use of all these emerging and emerged technologies such as Cyber Security Threats composing of Artificial Intelligence- Enhanced Attacks, Infrastructure and Supply Chain Attacks, Deep Fakes and Misinformation, Crimeware-as-a- Service (CaaS), Dark Web Economy, Attack Vector Diversity (Mobile and IoT), but to mention a few.

- 6. This laboratory thus emerge at a crucial time as the rapid adoption of all these emerging and emerged technologies, is transforming the nature of industries and the way of work worldwide.** Every industry and every organization will have to transform itself in the next few years, as what is coming at us is bigger than what we currently know, with the next 5 years being more disruptive than the last 15 years.

For Namibia, a nation committed to achieving its industrious ambitions, climate and sustainable development goals, these emerging technologies presents significant opportunities, particularly in the creation of new and green jobs. As we work towards economic diversification and resilience, the importance of combining these emerging technologies with environmental sustainability, cannot be overstated. These technologies can drive sustainable solutions in areas such as renewable energy, waste management, and conservation, all of which contribute to a greener and healthier Namibia. By developing systems that optimize energy usage, reduce waste, enables drought resilient agriculture and protect natural resources, we can align our economic aspirations with our environmental responsibilities, ensuring a legacy of progress and stewardship for future generations.

Ladies and gentlemen,

- 7. The Bank of Namibia views this Laboratory as a significant step in providing educators, students and researchers with access to advanced tools and facilities.** We remain hopeful that this will enhance your expertise, encourage the exploration of new ideas, and support the introduction of birthed innovations into the Namibian economy and workforce. By harnessing technology and birthed innovations to meet our specific needs, we aim to position ourselves as leaders among other African countries. A clear example of this is to be found in our ongoing green innovation.

While we work towards expanding green jobs and greening supply chains, research shows that these roles must also be inclusive, reflecting a diversity that spans gender

and background. Across emerging economies, men are more likely to occupy green jobs, a trend also observed in Namibia, where men occupy nearly 83% of green jobs. Addressing this imbalance is critical and emerging technologies and innovations brought to fruition at this laboratory, must contribute to an environment where all Namibians, regardless of gender, have equitable access to emerging tech and emerging green jobs.

8. **As we look to the future, technological innovation remains a critical catalyst to our progress, particularly through the integrated study of Science, Technology, Engineering, Arts, and Mathematics (STEAM) education, at all levels of our educational system.** The Bank of Namibia has dedicated itself to improving access to STEAM education, especially for students in rural communities, thereby ensuring that every young Namibian can digitally engage, especially in a digital and gig fuelled economy. As of today, the Bank of Namibia has between 2023 and 2024, exposed 480 rural students to STEAM education across eight different regions of the country. The Bank is hard at work to ensure smart partnerships with both public and private sector, to ensure coverage of STEAM education for our youth in all 14 regions in Namibia. The Bank's STEAM initiative, along with its support of this Laboratory, is all aimed at equipping students at all levels, with the skills and knowledge needed for the jobs of the future. As an institution, we remain steadfast in our efforts in this regard.

Ladies and Gentleman,

9. **In building a future-ready workforce and future-fit economy, collaboration with the Ministry of Education, Arts and Culture and other authorities to integrate STEAM into school curricula, remains essential.** As a Central Bank, we strongly believe that by embedding STEAM education as part of our educational curriculum and starting at an early stage of a child's education, we can foster a culture of innovation and technological proficiency among young learners. We further believe that having STEAM education as part of our educational curricula, will equip students with critical thinking, problem-solving skills, and digital literacy needed to excel in a rapidly advancing tech world and gig-economy. Thus, emphasising STEAM education will not only prepare learners of all ages for high-demand careers, but will also drive Namibia's growth, competitiveness, and ability to lead in global technological and scientific advancements.
10. **As the Central Bank of Namibia, we also understand the value of every drop, if you have to carry the waterload, thus we have truly walked our talk over the past**

three years. In this regard, the Bank of Namibia since 2022 actively pursued a digital transformation journey to ensure:

- A modernised Financial System;
- A digital future-proofed Central Bank with enhanced operational efficiency, service delivery, value creation and maximisation through the use of automation and robotics; and
- A digital future-fit workforce, by unlearning, relearning, reskilling and upskilling our staff in the fields of some of the identified emerging technologies such AI, ML, Robotics, Data Analytics, but to mention a few.

This transformation has yielded significant achievements within a short span:

- We re-engineered all the Bank's business processes
- We established an Automation Centre of Excellence that automates all aspects of the business ask, enables digital-end-to-end statutory mandate execution as well as stakeholder service delivery, with manual interventions minimized to the absolute minimum;
- We deployed Digital Workers also known as Virtual Robots, freeing staff from time-consuming, manual and repetitive tasks, which in turn drastically improved productivity, and enables our staff to function at higher cognitive levels and producing more intelligent and smart work
- We deployed the use of chatbots on our website, which significantly enhanced the stakeholder experience, and enables seamless interactions for regulated entities and the public.
- One of our most notable achievements in this digital transformation journey, is the development of the Government Payment Portal, which replaced a complex manual process involving Ministry of Finance officials visiting the Central Bank to process local and foreign payments. What once took months to complete per transaction, is now streamlined into an efficient system where payments are uploaded to an online portal, with a robot process automatically processing payments, reducing processing time to less than 2 minutes.

11. We have also implemented advanced data analytics, granting greater visibility into our operations and enabling prompt data-driven decision-making, thereby fostering continuous improvement. Additionally, our AI-driven Non-Performing Loan prediction capability, one of only two globally available, allows us to forecast Non-Performing loans up to four quarters ahead, completely automated and without human

intervention. In line with our monetary policy mandate, we have automated the collection of mineral data, which has improved data quality, speed, and reliability, ultimately strengthening our overall efficiency and analytical capabilities. We also partnered with global best to ensure digital-end-to-end supervisory activities, which should enhance efficiency and bring down cost of regulation. These advancements demonstrate our commitment to modernising our operations and positioning the Bank of Namibia at the forefront of technological progress, ensuring that we build a more inclusive, innovative, and resilient economy.

Ladies and gentlemen,

12. This Artificial Intelligence and Robotics laboratory inaugurated here today, serves as an accelerator, designed to encourage the active participation of students, faculty, and industry professionals in solving real-world domestic and global challenges. This facility will not only serve as a training ground for our future workforce but will also serve as a beacon of inspiration for the nation. We envision a Namibia where artificial intelligence is not only a tool of transformation but a driver of equity and sustainability, where innovation goes hand-in-hand with environmental responsibility, and where each young person sees a future filled with opportunity, creativity, and impact.

13. As we inaugurate this laboratory, let us all recognise that we are embarking on a journey that transcends technology. We are laying the groundwork for a future where knowledge, inclusivity, and environmental stewardship are at the forefront. A future in which Namibia is recognised not only for its natural beauty but also for its dynamic, skilled, and forward-thinking workforce and economy, that competes on a global scale.

In closing,

14. We express our sincere gratitude to the Namibia University of Science and Technology for their vision and commitment. We also extend our gratefulness to the students and faculty who will bring this laboratory to life, as well as to everyone who believes in the transformative power of education, innovation, transformation and collaboration.

15. We also bestow a special word of gratitude to the Bank of Namibia Team. Thank you for your willingness to always serve our great nation to the best of your ability. You will always be our most valuable asset.

Ladies and gentlemen,

Let this laboratory be the spark that ignites new ideas, empowers our youth, and accelerates Namibia's journey to a brighter, more prosperous future.

May this laboratory always be a State of Perpetual Agility, Always ready to evolve to whatever is the great new Computing Next.

We thank you.