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HIGHLIGHTS

- AFRICAN NATIONS URGED TO ADOPT DIGITAL SOLUTIONS TO ECONOMICALLY RECOVER FROM COVID-19
- ICT IS KEY IN TRANSFORMING AFRICA INTO A GLOBAL POWERHOUSE

IASP MEMBERS



Find IASP member science parks, innovation districts and other areas of innovation by browsing via country, technology sector or IASP <u>membership</u> category.



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FOREWORD



This inaugural IASP Africa Division Publication is part of initiatives for keeping members of the Division and our wider stakeholders informed on internal developments and on other relevant news mainly from the African continent. The International Association of Science Parks and Areas of Innovation (IASP) is a global network for Science and Technology Parks (herein referred to as parks, innovation clusters, etc) that drives growth, internationalization and effectiveness for its members including the countries that constitute the Africa Division.

Across Africa, developments on science, technology and innovation are accelerating at a fast pace. As outlined in insightful tech-focused publications such as the e-Conomy Africa 2020 report jointly prepared by Google and the International Finance Corporation (IFC), the continent harbours vast resources and opportunities which we shall continually explore and share with our esteemed readers.

In the past quarter of the year, the IASP Africa Division aligned its development strategies to addressing the growing need for innovators and science parks to support the continent's 1.3 billion people. From the Abuja Technology Village in Nigeria to Konza Technopolis in Kenya, Botswana Innovation Hub and The Innovation Hub in South Africa, we are coordinating an active network of professionals towards enhancing new business opportunities for companies and research organizations located in different parts of our continent.

During the period under review, our Division and IASP full member, Konza Technopolis of Kenya successfully hosted our first virtual Forum, during which we shared invaluable knowledge that remains critical in helping our economies recover from the COVID-19 pandemic. Together with innovation leaders from different parks, we also discussed

During the period under review, we were privileged to host this year's IASP Africa Division Forum in Kenya. We are glad that our member, Konza Technopolis, hosted this successfully.

insightful ideas on how we can leverage on the Africa Continental Free Trade Agreement to not only unlock economic opportunities for our populace but also create more compelling innovation environments for our Governments.

Through the Forum, we urged member states to support the development and growth of parks and areas of innovation as we committed to ensuring more visibility not just to our members but across the globe. This way, our collective experiences and expertise will position us as major contributors to the digital transformation in Africa and the associated benefits.

Aware of the impact of COVID-19 in our socio-economic lives, now is the time to build our resilience as we to explore ways of responding to both our health infrastructure gaps and economic needs. At the IASP Africa Division, we have been at the forefront in combating the health crisis through adhering to the global health precautions as advised by the World Health Organisation (WHO).

By leading from the front, our Division member states have been able to safeguard their human resources while working towards the development of their parks to become the best in the world. Beyond these efforts, we are glad to note that our parks are committed to supporting the continent's innovation capacity.

Eng. John Tanui is leading the Konza Technopolis in building Kenya's first smart city, Alan Phemelo Boshwaen shaped the development of Botswana Innovation Hub, Adv. Pieter Holl is delivering on the mandate of The Innovation Hub in South Africa and the same with the Abuja Technology Village in Nigeria amidst the COVID-19 pandemic. IASP Africa aims to highlight more members' stories through this publication.

Information and communication are essential ingredients for developing parks and innovation clusters. These are the bedrocks of this publication that we invite you to embrace as we aim for it to play a major part in documenting and highlighting our continent's innovation journey. We are keen on a participatory approach to the publication and would welcome useful contributions as we look forward to our next one.

I am grateful for the support that the IASP Africa Division members have accorded my presidency while driving our respective mandates of conquering higher innovation heights together. The Division commits to building a rich network of innovation parks across Africa.

Ms. Hauwa Yabani, CEO, Abuja Technology Village FZ Co., Nigeria and President of the IASP Africa Division



KoTDA HOSTS THE INTERNATIONAL ASSOCIATION OF SCIENCE PARKS AND AREAS OF INNOVATION AFRICA DIVISION FORUM

The Africa Division is headed by Ms. Hauwa Yabani of Abuja Technology Village FZ Co., Nigeria.

In March 2021, Konza Technopolis Development Authority (KoTDA) hosted the International Association of Science Parks and Areas of Innovation (IASP) Africa Division Web Forum.

During the forum, the Principal Secretary State Department of University Education and Research in Kenya, Amb. Simon Nabukwesi said that the Ministry of Education has completed a 10-year Master Plan for Science and Technology Parks (STPs) in Kenya. He added that the ministry has developed designs for the pilot STPs at Konza Technopolis and Dedan Kimathi University of Science and Technology and is currently at the procurement stage for design consultant and construction supervisors for prioritized physical sciences laboratories to be hosted within the STP.

"This plan which provides a framework for the implementation of STPs in the next 10 years is indeed a major boost in our efforts to strengthen the country's knowledge economy. We are at a good place as a country as we now have a framework for the implementation of the STPs in the coming years,"Amb. Nabukwesi said.

Speaking at the same event, Amb. Dr. Samori Okwiya, Chief Executive Officer of NEPAD/APRM Kenya Secretariat, said the African Union had adopted Agenda 2063 which articulates the continent's sustained growth, competitiveness and economic transformation.

"In order to enhance opportunities, there is need to focus on innovation and entrepreneurship through



collaboration between public and private stakeholders at both national and regional levels to facilitate cocreation and commercialization of innovation," he said.

In attendance was Principal Secretary, ICT & Innovation, Mr. Jerome Ochieng, IASP CEO, Ms. Ebba Lund, Ms. Hauwa Yabani CEO, Abuja Technology Village FZ Co., Nigeria and President of the IASP Africa Division, Nigeria, Adv. Pieter Holl, CEO, The Innovation Hub, South Africa, Alan Phemelo Boshwaen, CEO, Botswana Innovation Hub, Botswana, Eng. John Tanui, CEO, KoTDA, Kenya.

The event, hosted by Konza Technopolis Development Authority (KoTDA) was also attended by Amb. Dr. Okwiya, Dr. Erick Mwangi, Director Research Science and **Technology Ministry of Education** Kenya, Dr. Rethabile Melamu, General Manager, Green Economy Unit - The Innovation Hub, South Africa, Patrick Tippoo, Executive Director of the African Vaccine Manufacturing Initiative (AVMI), South Africa Dr. James Kimotho, Head of KEMRI Innovation & Technology Transfer Division (ITTD) and Mr. Ondari D. Mogeni, Associate Research Scientist, Epidemiology, Public Health, Implementation & Clinical Development Unit in International Vaccine Institute (IVI).

During the forum, African nations were equally urged to adopt digital solutions towards achieving economic recovery from impacts of the Coronavirus (COVID-19) pandemic.

The IASP is an independent, non-profit, non-governmental, membership-based organization with a worldwide network. The Association is a leader network in the Science Parks and Areas of Innovation spaces IASP has 7 divisions namely Africa, Asia Pacific, Eurasia, Europe, North America Division, Latin American and Western Asia & Northern Africa.

KONZA INTERNATIONAL ASSOCIATION **OF SCIENCE PARKS** AND AREAS OF INNOVATION AFRICA DIVISION FORUM HOST **SPEAKERS** Adv. Pieter Holl CEO, The Innovation Hub Eng John Tanui, MBS KoTDA CEO Innovation BIO South Africa novation Hub



Associate Research Scientist, Epidemiology, Public Health, Implementation & Clinical Development Unit in nternational Vaccine nstitute (IV) South Korea)



Dr. James H. Head of KEMR Innovation & Technology Transfer Division (ITTD)

NEWS

CHIEF GUESTS



CEO Abuja Technology Vi FZ Co., Nigeria and Presi of the IASP Africa Division Village



MODERATOR



Dr. McLean Sibanda Concessions with the Bigen Africa Group (South Africa)

Venue: Virtual Platform: Teams Date: Thursday, 18th March 2021 Time: 12.00pm to 5.45pm (EAT)

IASP CEO EBBA LUND: "SCIENCE PARKS SHOULD FOCUS ON **INTERNATIONAL** LINKAGES"



The International Association of Science Parks and Areas of Innovation (IASP) CEO Ebba Lund has reiterated the need for science parks to focus on building international networks as part of developing their parks and innovation spaces as well as tapping into the global market opportunities. Citing the fast-changing innovation landscape, Ms. Lund has stated that globalisation of the science parks is what will ultimately unlock more opportunities for most parks especially in Africa.

Speaking during the Africa IASP Division Forum organised by Konza Technopolis, Lund lauded the efforts of IASP members who are on the forefront of developing innovations that are being absorbed at a global scale.

"As science parks enhance collaborations and partnerships, the

need to embrace internationalisation is now imperative. This is what will improve our operations and position our products and services to the larger global market," said Lund. She urged science parks to also leverage their knowledge and assist in policy development as a way of creating favourable investment environments.

"The innovation industry is changing very fast and the role of science parks in policy making cannot be ignored. Since we are aware of the situation in our science parks, it will be important if we took part in policy making together with the governments entities as part of creating better innovation environment," said Lund. She was speaking during the IASP Africa division web forum hosted by Konza Technopolis, Kenya.





African nations have been urged to adopt digital solutions towards achieving economic recovery from impacts of the Coronavirus (COVID-19) pandemic.

Speaking during a webinar organized by Konza Technopolis Development Authority (KoTDA), International Association of Science Parks and Areas (IASP) Africa Division President and CEO of Abuja Technology Village FZ Co., Nigeria, Ms. Hauwa Yabani emphasized the need for utilizing technology and innovation in search for solutions to challenges facing the continent.

"The pandemic showed us the importance of digitally enhanced solutions in mitigating crisis as a way of living especially for a continent with a population of over 1.3 billion people. Digital transformation presents an opportunity for Africa to provide value in new ways thereby leapfrogging the continent's developing trajectories and accelerating its social and economic advancements," said Ms. Yabani.

She further stated: "The pandemic has been reported to have caused the failure to about 30 percent of small businesses, thereby begging for answers to the question on how to leverage innovation to survive," adding that it is only through innovation-led approaches that the continent will recover from the pandemic.

Technology, she pointed out, has continued to emerge and the adaption of digital solutions is more important now than ever, a development that is only important for Africa but also the rest of the world.

While reiterating the IASP Africa Division's support towards supporting innovation, she stressed the need for utilizing rising and existing start-ups in the continent which are critical

AFRICAN NATIONS URGED TO ADOPT DIGITAL SOLUTIONS TO ECONOMICALLY RECOVER FROM COVID-19

in advancing the continent's Free Trade Agreement for the benefit of all Africans.

The African Continental Free Trade Area (AfCFTA) created by Africa Union (AU) in 2018 created a single continent-wide market for goods and services that aims to promote the movement of capital and natural persons in the continent.

The Forum was also attended by Africa Union's (AU) New Partnership for Africa's Development (NEPAD) CEO Amb. Dr. Samori Okwiya, KoTDA's CEO, Eng. John Tanui, Botswana Innovation Hub CEO, Mr Alan Boshwaen, South Africa Innovation Hub and Adv. Pieter Holl, and the global CEO of IASP, Ms. Ebba Lund. The speakers urged countries to enhance collaborations and make use of available knowledge to advance the economies amidst the pandemic.

"There is an urgent need for the enhancement of collaboration between companies and research institutions and the support of both new and existing start-ups. We should utilize the science parks and create more favourable policies for advancing our knowledge-based economy. This is very important for both organizations and governments," said Ms. Lund.

On his part, Eng. Tanui cited innovation as a key enabler in driving economic development among Africa nations and urged participating members to build on innovation infrastructure to position themselves competitively.

"When we look at the Africa Free Trade, we see the opportunity of opening up connectivity amongst us and so we need to create more interconnection so that we open our trade. This is a great opportunity for Africa and this what we see as Konza," said Eng. Tanui.

The forum brought together IASP leadership, global players in the technology space and key stakeholders in the Science and Technology Parks to discuss The Place of STPs in Africa's Economic Recovery-Impact of the African Continental Free Trade Area Agreement.



ICT IS KEY IN TRANSFORMING AFRICA INTO A GLOBAL POWERHOUSE

NEWS

The Information, Communication and Technology (ICT) will play a key role towards the success of Africa Union's Agenda 2063 that has been dubbed as the blueprint for transforming Africa into the global powerhouse.

This was revealed by Africa Union's (AU) New Partnership for Africa's Development (NEPAD) CEO Amb. Dr. Samori Okwiya during the virtual IASP Africa Division Forum that discussed the The Place of STPs in Africa's Economic Recovery-Impact of the African Continental Free Trade Area Agreement hosted by Konza Technopolis, Kenya.

Speaking during the event, Dr. Okwiya said that through the agenda that aims to deliver on its goal for inclusive and sustainable development, Africa will largely require innovation and technology components that science parks and areas of innovation need to leverage on.



Dr. Samori Okwiya

"It is important to note that the AU has enacted a people cantered long term development agenda 2063 which strives to articulate Africa's sustained growth, competitiveness and economic transformation in new technologies and all developing sectors. To effectively execute this agenda, science, technology and innovation strategy is one of the strategic pillars,"

He added that governments and organizations need to focus on developing the ICT infrastructure to support the ongoing efforts of transforming the continent. Agenda 2063 captures not only Africa's

150,000 RESEARCHERS TO WORK IN MILANO INNOVATION DISTRICT UPON ITS COMPLETION

One hundred and fifty thousand researchers will work at Milano Innovation District, (MIND) upon its completion according to Mr. Alberto Mina, Adviser of International Arexpo S.p.A.

Mr. Mina, who was speaking during the IASP Africa Division Forum hosted by Konza Technopolis revealed that his organisation is working with other four public entities and a private partner Lendlease to actualize the project that was born from an expo event in 2015.

Mina said: "Four public institutions are driving MIND's Development and this will catalyse an influx of innovation companies and innovations upon its completion. One hundred and fifty researchers will be expected to work here by the next four to five years," he said adding that engagements with other companies and government entities is already underway as part of the efforts to develop the project.

Already, Italy's new research institute for Life Sciences - Human Technopole is at MIND and once completed, the innovation park is set to be home to other two research institutions which are the campus of the University of Milan and the Research and Treatment Hospital Galeazzi, which will provide a solid base for the creation of the innovation ecosystem. MIND is the leagev project of EXPO. the Universal Exhibition hosted in the city in 2015 and which helped to put Milan on the map as one of the world's innovation hubs. According to Mr. Mina, the city is projected to host over 70,000 visitors daily by the year 2029.

aspirations for the future but also identifies key initiatives that can boost Africa's economic growth and development.

SUPPORTING HUMAN RESOURCE IN INNOVATION PARKS; A CASE OF ZHONGGUANCUN SOFTWARE PARK

Zhongguancun Software Park, known as Zpark is located in northern China's Beijing. The science parks pride itself with specialized high software IT sourcing companies employing about 90,000 people.

During the IASP Africa Division Forum hosted by Konza Technopolis, Zhou Teng from Zpark made a presentation on how the park is advancing from being a science park to science community. Mr. Teng indicated that the idea behind the parks program was inspired by the fact that majority of innovation parks have not been focusing on their people who are the most important assets in science parks.

"We are now focusing on our people, we are now transforming from a science park to a science community whereby our focus is now pegged on building our human resource," said Teng, adding that the park is doing so by creating social products for such as sports events and other social events. This is one of the ways that innovation parks can build their science parks resources.

At Zpark, there are about 726 domestic and multinational software companies such as Oracle, IBM, Thomson Reuters and domestic innovative software companies such as Hanvon Technology, Dayang Technology, Xinwei Telecom, Lenovo, Baidu, Sina, Tencent, Venusetech, China Unionpay, Sugon etc, including 67 listed companies.



The Botswana Innovation Hub (BIH) is pleased to announce the recipients of the Botswana Innovation Fund Commercial Landing Call for Proposals. A total of 62 applications were received in response to this Call. Proposals were evaluated based on the proposed solutions' unique value proposition, social impact, commercial viability, technical viability and the individuals'/teams' ability and capability to develop and commercialise the solution. Following a rigorous assessment process, six (6) projects were selected to receive funding.

The Projects are as follows;

1. iBranch Recruiters

Research conducted by iBranch Recruiters attributed the high rate of unemployment to; poor visibility of talent and jobs, geolocation challenges, poor curriculum vitae writing skills and poor interview handling skills. The above challenges decrease any job placement chances

BOTSWANA INNOVATION FUND ANNOUNCED AWARDEES FOR THE COMMERCIAL LANDING CALL

in an already competitive job market. iBranch Recruiters offers a solution to these challenges by designing and creating a Centralized Database of all the talent in Botswana and make that database accessible to all potential employers with real time functionalities. The iBranch Recruiters mobile and web-based platform has the ability to connect employers with the relevant candidates with pinpoint accuracy, thus saving them costs associated with recruitment process. iBranch Recruiters would also play a role towards the skills development of the talent enrolled within the database as a way of turning them into productive and market ready candidates.

2. Ipachi Mobile Application

Most Small, Medium and Macro Enterprise(SMME's) face the challenge of poor financial information management making it difficult to access credit from financial institutions for business growth. Furthermore, unstructured financial data disempowers SMME's from making financially informed decisions resulting in unmanageable debts and financial distress. Ipachi Mobile Application uses machine learning to deliver an intelligent financial management system which can seamlessly fit the lifestyle of the user. Right in your pocket, Ipachi Mobile Application, help individuals and businesses find a better way to make smart payments, save money and connect them to investment opportunities anywhere, anytime. With real-time record-keeping features, Ipachi Mobile Application help users free up capital which gets them closer to their financial ambitions. Ipachi has an in-built robotic advisor that help users prepare instant financial reports and provide advanced analytics for performance management.

3. Automata Electron

Automata Electron is an energy management system that automates electricity flow in a home. The Automata Electron system works by being connected to all the lights and outlets in a home, therefore being



an intermediary between the outlets and the main supply and manages their digital footprint. In this way, the user can know at any given time what is happening at any outlet/ light and have control over it, even remotely. The electrical system of most domestic homes in Botswana is still analogy. Unlike digital systems, analogy systems offer no easy method to probe or debug the inefficient flow of electricity through them. Because of this, most homes tend to run an inefficient network, which may cause high electricity bills. Automata Electron converts analogy to digital systems.

4. Modisar Farm Management App

Modisar is a livestock management & tracking solution. It employs Precision Livestock Management through a farm management app available in IOS, Android & Web apps & an Internet of Things (IOT) livestock tracking solution. With the App, farmers are able to apply different management plans to different animals within a farm. Modisar also tracks the age of an animal through an AI powered Intelligent Farm Assistant (IFA) which continuously classifies a farmer's animals according to various age groups for better care. The App further alerts users via email, push notification & short text message (SMS) in an event that data on the animal being monitored is not relayed. The solution offers cost effective tracking and it is perfect for communal farmers that want to monitor the performance of their herd boy. The farm management solution helps farmers by guiding them towards profitable livestock production, while our tracking solutions helps farmers to fight livestock theft & straying.

5. LPWAN (Low Power Wide Area Network)

The advent of COVID 19 pandemic has resulted in an increased need for remote monitoring solutions. In an endeavor to address this need, IoT Communications (Pty) Ltd is developing a Low Power Wide Area Network (LPWAN) service that will make it affordable for individuals and enterprises to monitor the operational



and safety status of their assets from the comfort of their homes. The network will support applications such as asset tracking, smart utility metering, cold chain monitoring, home and industrial automation, etc. The solution employs Low Power Wide Area Network (LPWAN) technology to provide coverage for asset monitoring devices. LPWAN supports wireless communication over long distances, usually in the 10 15km range, while consuming very little power such that devices can operate for long periods of time on just batteries.

6. Load

Load is an on demand logistics platform that aims to create efficiencies and technology driven optimization to an already existing industry of logistics supply chain. Loads aims to build an all inclusive platform that democratizes opportunities around logistics allowing players to collaborate, create efficiencies, reduce the cost of running a business and bring suitability to operations regardless of size or scale. Load is a cloud enabled Software Service solution for any business regardless of size or scale. Load exposes its Application Programmable Interfaces (API's) to third party developers to innovate and enable them to build anything from simple mobile apps to more complex virtual reality (VR) experiences. These projects are funded by the Botswana Innovation Fund (BIF); a Ministry of Tertiary Education, Research, Science and Technology initiative, administered by the Botswana Innovation Hub (BIH).





In May 2021, the Embassy of Israel in Nairobi and Konza Technopolis jointly announced the winners of the Konza Innovation Challenge. The challenge provided an opportunity for innovators in Kenya and Israel to solve the immediate and long-term needs of Konza. It also presented a platform for cross-pollination and collaboration between innovators in the process fostering the spirit of partnership among the two countries.

Four winning start-ups will now pilot their innovations at the Konza Technopolis.

Below is brief profile of the four startups, of which three are from Kenya and one from Israel.

1. Intelligent Transport Management System by (Sonafrique] e-KRAAL Innovation Hub (Kenya)

Category: Parking Management System

Sonafrique is a team of engineers and software developers who specialize in intelligent traffic systems, simulations and development of traffic models to help solve traffic problems and guide reliable policy formulation.

All their traffic solutions follow a model-based approach relying heavily on accurately collected data

INTRODUCING START-UPS THAT WON THE KONZA INNOVATION CHALLENGE

with a vision to eventually design and deploy an adaptive intelligent traffic system.

Currently, the company is targeting public and private agencies seeking products and services related to road traffic. Sonafrique endeavors to solve the following customer problems;

- Difficulty finding an open parking slot.
- Inefficient use of existing parking facilities.
- Waste of time, fuel & other resources in parking and paying for slot.

The opportunities that Sonafrique have identified are as follows:

- Automate booking and payment of parking slots.
- Real-time monitoring functionality riding on used sensors.
- Big-data and long-data analysis for policy formulation.
- Local storage of data and analytics in compliance with The Data Protection Act No. 24 of 2019 (Part VI).

For more information, please visit: https://e-kraal.com/



Cabinet Secretary for ICT, Innovation and Youth Affairs Mr. Joe Mucheru, (holding a book) with some of the participants of the Konza Innovation Challenge. The challenge, which attracted 99 nominations from Kenya and four from Israel sought to provide an opportunity for innovators in Kenya and Israel to solve the immediate and long-term needs of Konza Technopolis.

2. HPass Global – (Kenya)

Category: Smart Access Control

HPass Global is a Mass Mobile Cloud Based Identity and Access Management System that comes complete with enhanced visitor experience tools to help users' access, navigate and enjoy their destination.

HPass Global is both webs based and App Based giving the user an incredible flexibility when accessing malls, buildings, offices, homes and smart cities using their mobile phones. After one simple scan using HPass Global App, the access control process is done in microseconds and communication of approval or decline is relayed to relevant signals points and personnel.

HPass Global Identity and Access Management System has been developed by HPass Global Limited, a Technology and Innovation company based in Nairobi-Kenya. The company's major interest is in Smart Cities, Modern Workplace, Mobile based Smart Access Management, Smart Enterprises and Smart Living.

As a future-ready company, HPass Global Limited seeks to achieve near zero infrastructure installations to support access management even for very complex places like Smart Cities.

While most access management solutions use cards or biometrics as the primary points of authentication and identification, HPass Global uses mobile phones as the primary point of interaction making it a timely solution to a world that is completely going contactless. The company is continuing to roll out innovative solutions that are solving myriad problems in a smart world.

For more information, please visit: https://www.hpassglobal.com/

3. PWG (Personal Watch Guard) (Kenya)

Category: Asset Management

Personal Watch Guard is a startup that offers solutions on affordable security services to the common citizen. The company has developed two products; DOOR TELL and PERSONAL SECURITY GUARD that are access control gadgets which will provide high end security in commercial and residential establishments at only a fraction of the cost of other available security options.

Both the DOOR TELL (DT) and the PERSONAL SECURITY GUARD (PSG) are built as access control gadgets which can be used in commercial and residential establishments.

4. Step-Hear - Assistive Accessibility Technology (Israel)

Category: Traffic Management

Step-Hear Accessible is a subsidiary of Mehalev, Israel's leading accessibility provider – with 23 years of experience in enabling accessibility solutions for a wide range of disabilities and thousands of customers.



Deputy Ambassador of Israel to Nairobi Eyal David (left) and Israel Ambassador to Kenya, Oded Joseph (right) presents an award to Laban Mwai of the Embassy of Israel in Kenya who who received the present on behalf of the Step-Hear – Assistive Accessibility Technology start-up from Israel. The startup will be offering its services on traffic management at Konza Technopolis.

Founded in 2008, the startup started selling at 2013, as a pioneer in accessible technology for audio orientation and guidance systems for visual impaired people, providing a solution also for other disabled people.

There has been more than seven years of successful implementation of Step-Hear -

 Step-Hear has thousands of installations in Israel and worldwide. The Step-Hear app can be downloaded free of charge.

Installed in leading Banks, Universities, Supermarkets, Malls, Parks, Tourist Attractions, Hospitals, Government and Municipality Offices, Buses and Bus Stations, and soon in the light rail.

Check out the company's website here: https://www.step-hear.com/ about-us/



(From Top Left - Top Right): Dedan Kimathi Science and Technology Park Head of Department Ruth Muriithi, Israel Ambassador to Kenya H.E Oded Joseph, Cabinet Secretary for ICT, Innovation and Youth Affairs Mr. Joe Mucheru, Konza Technopolis Development Authority (KoTDA) Chairman Arch. Dr. Reuben Mutiso, KoTDA CEO, Eng. John Tanui and iLabArica Director Dr. Joseph Sevilla together with the winners (holding books) of the Konza Innovation Challenge. Four Startups will be piloting their innovations at the Technopolis, dubbed "Sillicon Savannah."



Abuja Technology Village (ATV) represents an impressively ambitious initiative not just for Nigeria but for Africa as a whole. The demand domestically and throughout the region is obvious, with improved technological infrastructure and increasing digital transformation having impacts on skills and entrepreneurship development and, technology and knowledge transfer on a large scale – all leading to rising revenues and productivity within local technology companies.

The ATV development is strategically positioned to drastically strengthen Nigeria's tertiary sector performance and spawn positive externalities in a host of related sectors. Its phased development approach provides for facilities Development Plans with a range of asset classes released periodically as plans 001, 002, 003, etc including office, retail, residential and communal buildings.

Over twenty enterprises have been registered to develop a number of exciting projects ranging from facilities for the Production and Processing of Agricultural Seeds, Seedlings and Agro-Allied Products and the Production of Aviation Safety Equipment, Research and Training; ICT, Biometrics, Data Capture and Technology Research and Pharma Production and Health Services Centres; a Solar Panel Assembly Plant; a Modern Building Solutions Factory; a Science Museum; and, a University of Technology and Innovation.

The aviation sector client boasts of a combined industry experience of over 100 years ranging from airline operations; safety and quality assurance; marketing and consumer services; training and administration; crew roistering and optimization; and, safety audits. Simulators and cabins would be extensively used to replicate real life flight situations in a bid to develop capacity in handling safety and emergency issues.

ABUJA TECHNOLOGY VILLAGE ATTRACTS MULTIMILLION DOLLAR INVESTMENT COMMITMENTS

The Data Processing Centre offers training in augmented reality, animation and artificial intelligence towards upskilling a pool of talents that will help meet increasing local demand.

The Medical Research and Pharmaceutical Production Centre is for medical research and training of health care personnel as well as the development, manufacture and distribution of generic and brandnamed drugs in Nigeria.

The private higher education institution aims to educate highly qualified manpower for scientific research and technology transfer to contribute to the nation's socioeconomic development, particularly in the relevant fields of science and technology. It will offer value in 3 distinct areas namely service quality, affordability and economic development. The Building Solutions Factory is setting up to produce Insulated Concrete Formwork building systems, utilizing their tried and proven technology to service the rapidly growing need for sustainable housing products in Nigeria and the West African Sub-region while playing a very significant role in bridging the housing gaps in the respective markets and beyond by delivering the very vital tools needed for the building of excellent quality, environmentally friendly, optimally energy efficient, humanely priced, comfortable homes at a rapid speed of construction and with value-for-money features.

To participate in the current ATV Development Plan, please contact us through eoi@atv.com.ng to request to complete a business enquiry questionnaire.



BIH start-up company PriceMate launched their online Price Comparison Website under the theme: "Bringing Price Mate To The World". The product launch was officiated by the Hon. Minister of Tertiary Education, Research, Science & Technology, Dr. Douglas Letsholathebe at the Botswana Innovation Hub.

PriceMate is a Botswana Price Comparison Website that connects consumers and merchants across Botswana at a click of a button enabling consumers to "Save Time and Money". The platform offers consumers convenience of finding products without having to run around from one shop to another with an

BIH START-UP PRICEMATE LAUNCHES ONLINE PLATFORM

added benefit of comparing prices across various shops in Botswana at a click of a button.

PriceMate has developed a 'virtual mall' that transforms online shopping into the 'new normal' and minimizing the number of large crowds of customers in malls/shops. This fits squarely with Government's COVID-19 social distancing protocols. The website was meticulously developed by a team of young locally trained Batswana, specifically for the Botswana market as the first phase.

PriceMate is a company under the BIH incubation programme since 2018, receiving an array of services including; technical advice,



coaching and mentorship and other interventions for business growth.

"It is an exciting era in Botswana to see one of our own changing the landscape of shopping in Botswana, using game changing ideas that makes it easier for consumers to know where to find products and make online purchases at a click of a button. With technological advancement such as those provided by PriceMate, the country improves its status in terms of its ranking on the world digital stage." - Hon Dr Douglas Letsholathebe









For decades, Israel has been in the forefront of the innovation industry to an extent that it is now known as the "Start-up Nation." Multi-International companies such as Apple, Microsoft, Dell and 3M, just to mention a few, are now based in the country's Tel Aviv's city, which has recently been termed as the "Silicon Valley" of the Middle East.

Israel's success in the tech sector has continues to dominate even during the global Coronavirus Disease (COVID-19) pandemic period. In 2021, the country was ranked seventh among the most innovative countries by Bloomberg Innovation Index.

During the finals of the Konza Innovation Challenge, which was jointly undertaken by the Embassy of Israel in Nairobi and Konza Technopolis Development Authority (KoTDA), much was shared by the Israel Ambassador to Kenya, H.E Oded Joseph.

Under the challenge, four start-ups will be offering both immediate and long-term solutions for the smart city, including solutions on intelligent asset management, smart parking management, access management and traffic management.

While speaking about the country's innovation journey, Amb. Joseph started by saying: "The year 2020 was challenging to many people globally due to the to the COVID-19 pandemic but still, the ecosystem of innovation in Israel continued to thrive. In 2020, we had an activity of 9,500 startups in different stages. We have managed to realise 31 percent increase in investment capital in start-ups in

ISRAEL: THE WORLD'S START-UP NATION

Israel, raising about \$10 billion. Maturity level companies managed to raise about \$6.55 billion in 2020, three times more than in 2019 in capital ventures."

According to a 2020 report by Start-Up Nation Central (SNC), Israeli companies and startups raised nearly \$9.5 billion in capital in 2020, breaking all previous records despite the pandemic. The report further indicates that investments in Israeli companies went up by over 20 percent compared to 2019 while capital poured into local firms more than tripled in just six years.

With that in record, what lessons can Kenyan take and what is the story behind this success? What follows are some points shared by the Ambassador on how the country became a "Start-Up nation."

1. Necessity was the Mother of Invention

During the innovation challenge finals, Amb. Joseph noted that the most relevant reason behind Israel's success story that can be applied to Kenya is its move to solve its immediate needs as a nation. He indicated that when the modern Israel nation was set up in 1948, its priority was its defence system – in light of the enemies it had - and its food security, considering its climatic conditions which do not support agriculture naturally.

"As a nation, it is good to note that we do not have the luxury of enough water since two thirds of the land is in arid area. Therefore, these challenges have enabled us to think and find creative solutions for the development of our nation over years making our innovation industry to grow at a fast pace," he said.

2. Commercialising Innovation to the Civilian Sector

"Many of the innovations that were relevant in our defence sector were adopted in the civilian life," said Amb. Joseph as he stressed that the commercialisation aspect of their country's innovation system has enabled many start-ups to rise over time.

Data from the Israel Advanced Technologies Industries indicate that there are now about 1,600 life science companies in the country employing more than 80,000 people.

In the academic field, commercialisation culture of start-ups has been adopted to create more opportunities. In 2019, Benjamin





Soffer, chairman of the Israeli Tech Transfer Network and former head of the Technion - Israel Institute of Technology - had this to say: "Colleges that don't embed marketfocused innovation into their DNA are doing a massive disservice to their students who will need to invent their own jobs."

With such a culture, the country has embedded commercialisation of startups in its economic system enabling more students to join while also creating job opportunities and revenue for their country.

This has continued to build the academia space of the country with a major focus on innovation. According to the Israel Innovation Authority, the country's highest number of PhDs per capita provides fertile ground for research and innovation.

3. Government Support in Innovation Industry

According to H.E Joseph, government support in start-ups development in Israel has played a critical part in advancing the country's innovation industry. With Israel's Innovation Authority in place, the country has managed to provide more support in terms of funding and policy support, all geared towards effectively addressing the nation's innovation needs.

In Kenya, the government through the Ministry of ICT, Innovation and Youth Affairs has also created a number of initiatives like the Constituency Innovation Hubs (CIH), the Ajira Program. Through Projects such as Konza Technopolis, this support will further entrench innovation in the country.

4. Israel's Winning Spirit

The Israel Ambassador made another revelation: "When I am asked about

the most important factor that made us to be a start-up nation, I believe it is our willingness to fail while trying to create solutions that have positioned us there. Sometimes it is better to fail before you win. We do not fear failure, we do not hesitate to fail since from failure one can learn. For me, number one reason to succeed is not to be afraid to fail."

During the Innovation Challenge finals, the Chief Guest at the event, Cabinet Secretary for ICT, Innovation and Youth Affairs, Mr. Joe Mucheru urged participating firms to continue innovating even after failing.

5. Partnerships with other Nations

Amb. Joseph also indicated that partnerships have also played an important part in developing the country's innovation sector. Through the innovation challenge, the country has grown its cross-pollination capacities while also tackling different challenges across the world.

As Konza looks forward to having Personal Watchguard, Ekraal Hub, H-Pass and Step Hear startups pilot their innovations at the Technopolis, it would be prudent to borrow some lessons from Israel's success story.







The Assistant Minister of The Ministry of Tertiary Education, Research, Science and Technology, Botswana, Hon. Machana Shamukuni met with

BOTSWANA EDUCATION ASSISTANT MINISTER MEETS WITH BIH STARTUPS

BIH start-up companies housed under the First Steps Venture Centre Technology Incubator Program. The purpose of the visit was to appreciate and appraise the progress made by projects within the BIH Incubation Program.

"I am glad to have interacted with some of the innovators assisted by BIH. The innovators are really putting a lot of effort in developing relevant solutions, they need Government support, Private Sector support and Community support to see their solutions to fruition. We reassure BIH of Government's commitment to

supporting and assisting the Hub in developing and capacitating research and innovation in the country albeit challenges of limited resources. Solutions to our challenges are best developed by our own innovators, and they are indeed capable of that. There is need for Government's uptake of local solutions hence we are reviewing the PPADB procurement policy. I believe that there is need for preferential procurement from our innovators that is deliberate, in order to grow our own market" Said Hon. Shamukuni.



Innovation is happening here...come and join us...

We support growth of start-ups and existing companies through innovation capacity building, access to funding and national technology transfer office services

- We create linkages between different players in the national innovation ecosystem for collaboration opportunities
- We attract like-minded, innovative and technology driven businesses to establish their operations in the Park
- We Manage and develop the Science and Technology Park to create a thriving innovation ecosystem

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During the IASP Africa Division, the CEO of Surrey Research Park in the United Kingdom, Dr. Malcolm Parry emphasised on the need for close collaborations between innovation parks and universities as part of supporting entrepreneurship and preparing students in innovation industries.

BRIEFLY: UNIVERSITIES URGED TO WORK CLOSELY WITH INNOVATION PARKS TO BOOST STUDENTS SKILLS

Commenting on the need for close links with international colleagues, Dr. Parry added that as research innovation parks need to explore grounds of working with students to guide them on the latest trends in the industry. Surrey Research Park is a major centre of excellence in technology, science, health and engineering for all sizes of business from start-ups to multinationals. To learn more: https://surrey-research-park.com/

QUICK HIGHLIGHT ON ENSPIRE ATV'S IDEATE PROGRAM

Amongst the major initiatives of Abuja Technology Village FZ Co. is enspire, a platform that stimulates economic growth and sustainable job creation through innovation, entrepreneurship, enterprise development and technology commercialization by providing training, mentoring, networking opportunities and access to angel investors. It is a tech-centric incubation program focused on building viable businesses.

enspire ATV's Ideate is among the few local startup programs contributing to very early stage business development. It is a five (5)week ten (10)-session workshops with experts, mentors and coaches focused on helping individuals and groups realize their business ambitions. The goal of the workshop is to support individuals and teams in creating solid value propositions for their planned businesses from practical points of view following which they are able to properly define their value propositions, identify their customer segments and have general alignment of their businesses with market realities. Highlights of the program. The workshop segments cover Design Thinking, Value Proposition, Customer Segments/Channels/Relationships, Key Activities/Resources/Partners, Revenue Streams, Cost Structure

and Other Essentials while activities undertaken by the participants include Market Research, Exploring People's Pain Points, Dissecting Buyer Personas, Business Model Canvas Creation and Elevator Pitches.

The great facilitators who shared insights and experiences with our most recent Ideate cohort members are:



Andia Akidiva Kenya



Ayemoba Godswill Nigeria

Umar

Nigeria

Mahmoud



Vaičiulis Laurynas Lithuania



Fady Terek Egypt



Ziyad Basheer Saudi Arab

While some of the outstanding participants who have continued to grow their businesses are Lekie Akpa Beako building a solar installation and management solution with digital billing system for homes and SMEs in Nigeria, Obike Chima with Gurutech, a learning solution that offers quality and affordable ICT education to middle income earners in Nigeria, Obah Sylva's with a marketplace portal for distribution of cement and Nzewi Uchenna's Afro Emotikon, an emoji company that develops graphics used to chat and leave comments in blogs, newspapers online, editorial publications online and, adopts use of emoji for e-learning.

enspire seeks participants in Ideate and facilitators on a rolling basis. To join this highly impactful platform to develop your startup ideas or to contribute to their success stories as facilitators, please reach out through ideate@enspire.org.ng.



eKasiLabs, the Innovation Hub's vehicle to promote the culture of innovation and entrepreneurship in townships, recently hosted MEC Parks Tau and other stakeholders for a panel discussion to promote the progress of the eKasiLabs programme and to discuss solutions to the problems faced by entrepreneurs in townships.

"The eKasiLabs programme was developed in support of the Gauteng Township Economy Revitalisation policy. It is focused not only on providing access to working infrastructure for township-based entrepreneurs but also offers a range of capacity development interventions such as business mentorship, technical skills training, networking opportunities and assistance to market access," says CEO of The

Innovation Hub, Advocate Pieter Holl. MEC Parks Tau encourages the public and private sectors to collaborate with township companies, facilitating growth from micro, small and medium businesses to big, established businesses.

"I have a problem with the notion that when it comes to the township, it becomes micro, small or medium," says Tau. "The intention is not for the township entrepreneur to stay small. We want them to grow big. Township entrepreneurs should think beyond small," he adds.

There are many opportunities for township entrepreneurs to be involved in large business processes. "Entrepreneurs should take advantage of the opportunities afforded to them," says Tau. "We need to move from just innovation to acceleration," he adds.

At the event, MEC Parks Tau and the panellists discussed problems that South African

MEC PARKS PROMOTES DEVELOPMENT OF TOWNSHIP ENTREPRENEURS

entrepreneurs in townships face, such as the lack of access to technology and the internet. Across the world, people with access to internet and technology were able to adjust their lives when the COVID-19 pandemic struck. This was unfortunately not the case for most township entrepreneurs. eKasiLabs strives to provide a solution for this problem by setting up Hotdesks in local townships.

Envisaged to be implemented over the next three years, the HotDesk pilot in conjunction with Izipho Zomphakathi was set up to create real-delivery simulation that would through partnerships with the Gauteng Provincial Government and Microsoft South Africa help to deliver on the Youth Skills for Employment Initiative. The Hotdesk

Pilot's key objective is to provide training to youth that have an interest in web development, data analytics or low coding.

The panel discussion was dominated by the issue of including township entrepreneurs into the supply chain. Two of the biggest challenges are procurement and the access to state funding. "Our entrepreneurs do not have the history required to obtain state funding and they do not qualify for procurement processes, because of a lack of qualifications or experience. Government and other agencies should look at these criteria for township entrepreneurs to ensure a fair playing field," says Ms Nothile Mpisi, GM of eKasiLabs.

Since 2014, ten eKasiLabs have been set up across Gauteng Province through collaboration with various partners, including academic institutions and local government. Of all the eKasiLabs, the Soweto eKasiLab is the most developed incubation centre to date.

"We are excited for what the future holds for eKasiLabs and the incubatees at The

Innovation Hub. We strive to provide opportunities for our local township entrepreneurs, to help them flourish and grow into big enterprises", concluded Holl.



Panellists (Left to right): Mr Tumelo Dichabe business owner), Ms Nothile Mpisi (GM of eKasiLabs), Ms Matsi Modise (Board member and entrepreneur) and MEC Parks Tau.

In recognition of the vital role that women and girls play in the science, engineering and medical spheres. Two such South African powerhouses, Sibongile Mongadi and Kathryn Malherbe share how they have broken down barriers and added tremendous value to the scientific community with innovations from their respective companies – Uku'hamba and Invisio AI.

At present, less than 30% of researchers worldwide are women. And although there has been a rise in the number of women carrying out studies in scientific fields, there are still relatively few women in science in the workplace.

In what remains a largely male-centred industry, there are many obstacles that women in science have to overcome, including a sense of belonging, harassment and bullying, as well as being compensated differently to their male counterparts.

Despite these challenges, women, like those with companies housed at The Innovation Hub, have broken down the barriers and have succeeded at creating innovations that aim to change the lives of those around them.

"The women we work with – Sibongile and Kathryn being two prime examples – never cease to amaze us with the meaningful impact that they make with their innovations," says Advocate Pieter Holl, [CEO] at The Innovation Hub.

GAP Township economy identifies and promotes township-based innovations that lead to growth in the township economy. First place was awarded to Mamntlane Phyto Pharmaceuticals & Nutritional Supplements for Elderberry and Pelargonium Cough Syrups. These cough syrups are free from alcohol and are plant-based. They are used medicinally for various health conditions including coughs, flu, colds and even diabetes.

"Although there is still much that needs to be done to ensure equality of women in science, those who excel in spite of the obstacles they're faced with motivate other women to do the 2 same and help to level the playing field. We currently have 160 female entrepreneurs housed at our establishment, but we've been pleased to see that this figure is on the rise every year," he adds.

WOMEN IN SCIENCE: HONOURING THE LOCAL POWERHOUSES WHO HAVE BROKEN DOWN BARRIERS

An innovation for people with life-altering amputations

Sibongile Mongadi, is an entrepreneur currently incubated at The Innovation Hubs' eKasiLabs Soweto programme (eKasiLabs provides business development support to startups in various Gauteng townships). Uku'hamba focuses on improving the conditions of amputees by providing lightweight, durable, water-resistant, custom-made and low-cost prosthetics. Her invention ultimately serves to improve the living conditions of those who have had lifealtering amputations.

Mongadi drew inspiration from her interactions with an amputee at a health facility in Johannesburg, who had been on the waiting list for more than four years, struggling to get access to a prosthetic limb.

With currently three million amputees in South Africa, only 30% have access to prosthetic care.

"That provoked me to make a positive impact and to start producing low-cost prosthetic limbs to improve amputees' quality life of by giving them back their independence," says Mongadi.

Mongadi – with an educational background in Marketing, Entrepreneurship, Innovation Management and 3D printing – uses advanced technologies (3D scanner, designing software, 3D printer, a CNC milling machine and a laser engraver) along with resourceful and recyclable materials to make mobility accessible to lower- and middle-income groups, with a faster turnaround time than general prosthetics.



Breast cancer identification made easier

Another woman pushing the limits of science is Kathryn Malherbe. MedAl Sol Pty Ltd. is working on the development of Deep Machine Learning (DML) and Artificial Intelligence (AI) software for breast cancer identification and segmentation for breast ultrasound in the diagnostic imaging sector.

Having worked in clinical practice for the past 15 years, she was inspired to understand why breast cancers are at times missed during ultrasound imaging.

"In order to do give cancer a 'name', you require on-site infrastructure to do a biopsy to send to the pathologists who have to evaluate the breast tissue under the microscope to identify what type of cancer it is. Most clinics don't have the facilities needed and having thorough 4 biopsies done can take up to six months for a patient to get the answer they need, delaying their standard care of practice," says Malherbe. "Our innovation can make a real change in the high mortality rate currently associated with breast cancer in South Africa," she adds.

Malherbe has always been a problem solver and started her journey in science 15 years ago when she did her undergraduate studies in Neuroanatomy and then went on to complete her Master's degree in Radiography and Mammography.

"It is important that female scientists stick together to overcome the inequalities in the scientific workplace. The sharing of resources and networking has helped set women up for success, and we encourage women to keep doing so," says Holl.

"The Innovation Hub strives to pave the way for women to reach their goals and to make a difference for many more women in the future," he concludes.



Malherbe and her innovation: Invisio AI



Abuja Technology Village Science and Technology Park (STP) and Special Economic Zone (SEZ) is located in Nigeria's Federal Capital Territory, Abuja. The STP is poised to become Africa's preferred destination for technology research, incubation, development and commercialisation across 4 focus sectors of Information and Communication Technology, Biotechnology, Minerals Technology and Energy Technology. The Park offers a balanced lifestyle environment for tenant businesses to operate with competitive advantage, access to Africa's largest consumer market, proximity to every part of Nigeria and easy access to key global destinations.

The STP masterplan sets out to create an environment built to the highest global standards of design, construction and sustainability. Key to this concept is the development of

HIGHLIGHTS OF ABUJA TECHNOLOGY VILLAGE

commercial, retail, mixed-use and residential facilities within a sizeable green space setting that comprises natural vegetation and habitats as well as contemporary urban landscape features encompassing outdoor recreational facilities.

The project provides a host of positive externalities. At the local level, it will continue to be a key source of jobs and revenues in Abuja - something that is increasingly necessary with rapid population growth. With direct employment at the ATV is expected to reach 140,000, the initiative will be one of the City's largest employers.

ATV is unique in Nigeria and it turns to similar global initiatives for the project's parameters to ensure effective governance. Its full membership with the International Association of Science Parks and Areas of innovation (IASP) and other international bodies helps with this.

All of ATV's goals are supported by the Park's SEZ status. Institutions that establish businesses at the Park are required to operate under stipulated guidelines regulated by the Nigeria Export Processing Zones Authority, an agency that is responsible for regulating Free Zones in the country. Tenant companies in the Zones are entitled to the following among other incentives and concessions: Tax and Custom duty waivers, Full repatriation of profits, Zero quota on expatriates, One-stop-services for all business registration and licensing needs, etc.

With focus on a handful of key emerging sectors indicated above, ATV aims to foster innovation and entrepreneurship both domestically and throughout sub-Saharan Africa.





Statistics show that 15% of people will experience some form of disability (be it permanent or temporary) throughout their lives, especially as one ages*. According to the World Health Organisation, a disability is the consequence of an impairment that may be physical, cognitive, mental, sensory, emotional, developmental or a combination of the above. South African entrepreneur like Portia Mavhungu has created an innovation that is set improve the lives of those with disabilities.

Mavhungu is the 2017 first prize winner of the GAP Medical Innovation Competition hosted by The Innovation Hub (TIH). She used her R 200 000 seed funding prize money and complementary business incubation to further innovate and finalise her invention, the 'Para Tube'. A wheelchair seating system that allows a person with disabilities to use the toilet without having to be lifted out of their chair.

"Not all disabilities are equal," says Mavhungu. "The privilege that one has plays a major role – access to healthcare, education and employment opportunities are all factors to take into account. I want to help improve the lives of those who use a wheelchair and don't have assistance," she adds.

INNOVATION AIMS TO IMPROVE LIFE IN A WHEELCHAIR

"Unfortunately, people with disabilities often bear the burden of adopting negative beliefs about their disability and feel ashamed or embarrassed by it. Disability is part of the human condition, this marvellous invention could help dismiss those negative self-beliefs and provide more independence to disabled persons," says Advocate Pieter Holl, CEO of The Innovation Hub.

The invention is designed to help those with disabilities relieve themselves discretely. How the device works is simple: the middle part of the seat pulls out by means of a handle and flips to make the shape of a toilet. The product makes use of chemicals, biodegradable disposable bags, seating and sanitisers.

Mavhungu's inspiration comes from spending seven months in a wheelchair herself, after breaking her pelvis. "I realised how tough it is for disabled persons," explains Mavhungu. "I found it was a challenge trying to use the bathroom by myself and felt like I had lost my independence when I had to ask for help," she adds.

Following a setback in production due to the pandemic, Mavhungu plans to roll out her invention in nursing homes, hospitals, and medical facilities in the new year. "I want to be able to showcase the importance of this product to persons with disabilities, showing them that it is not just a product, but a product that brings change to one's life on a personal level," Mavhungu says.

The South African Government emphasises the importance of disabled persons being seen as equal role players in the economy and making sure that women and children with disabilities will be protected and seen as equal citizens within their communities.

"It is our responsibility as a nation to drop the stigmas associated with disabled persons, and to start building a better future; a disability-inclusive, accessible and sustainable world, now, and in the future," concludes Advocate Holl.

I want to be able to showcase the importance of this product to persons with disabilities, showing them that it is not just a product, but a product that brings change to one's life on a personal level, *Mavhungu says*.



INNOVATION PARKS DEVELOPMENT:

The 400 acres of Phase One of the Konza Technopolis project has attracted over 40% uptake by investors. This comes at a time when the infrastructure currently being undertaken by the Government of Kenya is set to be completed by end of 2021.

At the same time, the project's anchor investor Kenya Advanced Institute of Science and Technology (KAIST) will begin work in few months, following identification of a contractor and approval. The graduate school will focus on Science, Technology, Engineering and Mathematics (STEM).

This was revealed during a networking breakfast organised by the Konza Technopolis Development Authority (KoTDA) in Nairobi. The meeting brought together investors who have already signed up to take space within the Technopolis.

While speaking during the event, Principal Secretary ICT, Innovation & Youth Affairs, Mr. Jerome Ochieng said: "So far, we are happy to note that the project has realised more than 40% uptake, some of the investors expected to break ground include hospitals, real estate developers and institutions of higher

KONZA TECHNOPOLIS PROJECT ATTRACTS 40 % UPTAKE BY INVESTORS

learning, government agencies such as National Construction Authority and KETRACO (Kenya Electricity Transmission Company) among others."

The National Construction Authority (NCA) is also in the process of setting up a Centre of Excellence for the country's construction industry and the construction of the project will soon kick off, the PS added.

Speaking at the same event, Sosian Energy Chief Executive Officer, Mr. Shaun Nzambuni said the company, which is one of the pioneer investors in Konza is providing solar power and waste power which will lower cost of power and cost of doing business at Konza Technopolis.

"Konza is going to lead ICT development. It is going to be a centre of expertise in the decades to come. The initiative taken by the Government some years ago is an excellent development for the country and we are proud Sosian is part of it. We are confident we will be able to provide significant energy savings for the people who invest in Konza City," Mr Nzambuni.

On his part, CEO of GS1 Kenya, Mr. Peter Otieno which offers globally acceptable numbers for barcodes said the organization plans to set up at Konza Technopolis in 2021. He lauded the project, terming it a thoughtful and great innovation.

PS Ochieng' urged investors from both the private and the public sector to consider taking up the investment opportunities early enough, adding that partnering with investors will boost the country's efforts towards realization of the Konza dream.

He mentioned that some opportunities that are available for investment at the Technopolis include Smart Manufacturing, Light Industry Logistics, Smart Agriculture, Property development, ICT & IT Enabled services, Pharmaceutical services, Education & training institutions, Hotels & Convention Centres, Entertainment, recreation and sports facilities, Business enterprises among others.

KoTDA CEO, Eng. John Tanui indicated that the development of the infrastructure is on course. This includes street-scape and sub-surface utilities, drainage facilities, water supply distribution system, waste water collection and reclamation facilities, electrical power supply, public parks, and public facilities.



THE INNOVATION HUB PROFILE

INNOVATION PARKS DEVELOPMENT:

The Innovation Hub is an innovation agency of the Gauteng Province is responsible for the conceptualisation and implementation of innovation programmes, as well as the full development and operation of The Innovation Hub Science and Technology Park. It is a wholly owned subsidiary of the Gauteng Growth and Development Agency. It was established in 2001 by the Gauteng Provincial Government through its Department of Economic Development, to promote economic development and competitiveness of Gauteng through the fostering of innovation and entrepreneurship.

The Innovation Hub enables smart businesses to develop and commercialise innovation and technology through creating new business opportunities and adding value to mature companies, fostering entrepreneurship and incubating new innovative companies. As well as generating knowledge-based companies and building attractive spaces for emerging knowledge workers and enhancing the synergy between industry, government, academic, research institutions and partnerships.

The Innovation Hub utilises several enterprise development programmes to accelerate innovation in South Africa. These programmes include:

 Maxum Business Incubator, which consists of Maxum Smart, an enterprise development programme which offers business development support to start-up companies in the smart industry (ICT and advanced manufacturing).

Maxum Digital provides business development support to digital startups in gaming, animation and virtual reality, as well as supports unemployed graduates and township youth in collaboration with Wits University. Maxum Digital strives to place South Africa as a frontrunner of gaming, animation and virtual reality by supporting and training entrepreneurs with a passion for the industry.

 BioPark@Gauteng focuses on bioeconomy (agro processing and health), and therefore provides business development support to start-ups in the health sector (biopharmaceuticals, medical devices and diagnostics, indigenous knowledge-based nutraceuticals, nutrients, cosmeceuticals, cosmetics) and agriculture (food-processing, bio-processing, smart agriculture) sector. The latter is an incubator that serves as a development agency for the commercialisation of bioscience products to identify potential entrepreneurs with innovative technologies to convert biosciences research into commercially viable venture.

- The Climate Innovation Centre South Africa (CIC) provides business development support to start-ups and small businesses operating in the green economy sector (focusing on energy, water and waste sectors). It was established in collaboration with the World Bank infoDev and is also supported by the Development Bank of Southern Africa (DBSA).
- eKasiLabs is The Innovation' Hub representation in various (10) Gauteng townships in collaboration with various partners, including academic institutions and local government. The programme includes incubation and skills development and seeks to promotes a local culture of innovation and entrepreneurship, by providing business and skills development support to startups and post graduate students in different sectors, that can contribute to the growth and development of the township economy.
- mLab Southern Africa is a registered non-profit organization that is powered through the support of the Ministry of Foreign Affairs of Finland, the Department of Science & Technology, The Innovation Hub, the V&A Waterfront and the World Bank infoDev. It is a mobile applications laboratory, which incubates innovation and entrepreneurship in the mobile channel, to stimulate the use of mobile solutions in government service delivery.

In the skills development sector, The Innovation Hub renders a range of skills development programmes which include:

- CoachLab: a youth-targeted skills development and postgraduate leadership development programme, which focuses on ICT and engineering sectors through internships, mentorships and learnerships. It aims to bridge the gap between academia and the demands of the industry. It is managed by The Innovation Hub in collaboration with prominent industry partners, government and academia.
- Code Tribe (an extension of CoachLab) is a bursary programme aimed at developing the next generation of software developers. The programme trains young

mobile developers for the Android Operating System, backend and Cloud platforms while using SCRUM Agile methodologies.

• FabLab is a school programme aimed at promoting the culture of innovation and entrepreneurship at school level and creates a platform for identifying and nurturing entrepreneurs at an early age.

FOSTERING INNOVATION

The Innovation Hub runs the following innovation-enabling activities.

OpenIX is an Open Innovation Exchange that delivers tangible solutions to real challenges posted by solution seekers in government and the private sector. The platform connects leading African researchers and entrepreneurs with new opportunities to commercialise their innovations.

Gauteng Accelerator Programme (GAP) Innovation Competitions, recognise, reward and celebrate top innovators in the ICT, Biosciences, Green and Medical technology sectors. The competitions target innovative ideas that have a potential to significantly impact the Gauteng economy.

Innov8 is a flagship networking and collaboration platform that provides an opportunity for industry thought leaders to share their experiences and offer advice to the entrepreneurial community.

INNOVATION ENABLING SPACES

The Innovation Hub also offers collaborative spaces both in The Science Park and throughout the Gauteng region.

Office Space/Tenants: The Innovation Hub provides high quality office space to knowledge-based enterprises in a number of multi-tenant buildings. These include individual serviced offices, with flexibility to accommodate large and small companies.

Conferences, events and meetings: The Innovation Hub has 11 conference venues with the capacity to accommodate up to 250 people in cinema style. The facilities include a 15-seater video conferencing room, VIP lounge and various hot desk options.

Land for development: The Innovation Hub Science and Technology Park is strategically located at the heart of the Smart Corridor within proximity of leading research, academic and national institutions such as CSIR, University of Pretoria and the Department of Science and Technology.

Individual plots are available on-site for companies looking for land to build offices, that are uniquely designed on a long-term lease basis. Companies operating in The Innovation Hub's priority sectors have preference, as they are well-suited to benefit from the vibrant atmosphere exuded by an innovative community.



OPINION



The year 2020 made two things crystal clear for governments, corporates and individuals. First, it painted a clear picture that innovation is key for not only battling adversities, but also sustaining economies. Second, it is crucial for any country to have an elaborate technological infrastructure for rapid development.

Across the world, pandemics have been known to push economies and individuals to limits never seen before. They have also tested resilience of businesses and taught valuable lessons about surviving and innovating. It is during such circumstances that countries, organizations and individuals adapt to new ways of doing things, leading to better societies. Given humanity's resilience, the world has witnessed increased creativity and innovation in times of crisis. During the Great Depression of the 1930s for instance, the stock market crashed, resulting in millions of people losing their jobs. As much as people were in despair, they turned around their arduous times and developed some of the greatest innovations during that period. Patents spiked with such innovations as ballpoint pens and sliced bread. Another innovation that came in handy was the car radio as during that period, music helped to uplift the spirits of many.

To a large extent, we have seen innovation play a big role in the continuity of our education, judicial system, administration, supply chain, financial system and health system activities among other sectors.

UTILISE INNOVATION HUBS FOR STRONGER ECONOMY

By Eng. John Tanui

In our country's Judiciary, the e-filling system and live court proceedings saved many operations during the Coronavirus Disease (Covid-19) Pandemic, thanks to the innovations which are being spearheaded by different innovation hubs in the country. This shows that if well enhanced, these hubs can give more solutions for the country for a stronger economy and a brighter future.

Innovation plays a key role in development. We have continued to see progress in Kenya and across the continent. Data from Global System for Mobile Communications (GSMA) Ecosystem Accelerator mapping programme conducted in 2019 indicates that Africa has more than 600 innovation hubs which are already leading the way in economic recovery and agility towards the everchanging economic environment.

With the mapping indicating that Nigeria, South Africa and Kenya has 85, 80 and 50 known innovation hubs respectively, the role of stakeholders in championing the utilisation of these hubs in improving Kenya's digital economy is now more important than ever.

At the onset of the Covid-19 outbreak, Konza Technopolis partnered with the academia sector and non-state actors to hold the Great Covid-19 Innovation Challenge which attracted more than 300 innovations. Out of these entries, 15 emerged winners having developed solutions ranging from health systems innovation, food system innovation and dignified work challenge. The number of participants in this challenge is a clear demonstration of the potential we have in the country in finding solutions to our problems. Such initiatives are critical in the establishment of innovation hubs.

A country like Kenya has an edge due to its young population. Data from Kenya National Bureau of Statistics on the 2019 Census indicates that about 75 per cent of the country's population is aged below 35 years. As a way of creating opportunities, the Government has established over 300 Constituency Innovation Hubs (CIHs) where the youth are trained on online jobs through the Ajira Digital platform. Such programmes aim at stimulating the digital economy while opening up job opportunities for the young people.

Undoubtedly, these are some of the platforms that are currently harnessing our country's future innovations. The challenge however is for us to develop our own initiatives which will not only meet Kenya's needs but also those of other nations across the continent and the world.

As this happens, it is important to note that additional innovation on techfocused programmes will help tackle challenges in health, agriculture and education.

With innovation hubs such as Lakehub in Kisumu, I-Lab in Nairobi and SwahiliBox in Mombasa already leading the way, consideration can be made to explore their offerings and those by major entities such as Konza Technopolis in building this important ecosystem.

This way, innovation is likely to become the next economic frontier, in the process increasing our Gross Domestic Product (GDP) as we continue building our knowledge economy. Being a major pillar of progress and growth of nations, knowledge is considered a catalyst for intellectual and social mobility.

The challenge therefore is to ensure that we continue to invest in technological capabilities and special skills in line with the changing industries, jobs requirements and dynamic market needs.

The writer is the CEO, Konza Technopolis Development Authority (KoTDA)

Our global community in action at IASP Virtual 2020

Two and a half days of content, 55 different sessions, 120+ speakers from 41 countries, almost 400 delegates from 61 countries worldwide...if any single event can be said to give a representative picture of global innovation ecosystems it was last year's IASP Virtual, where the IASP African Division had a key role to play.

Bringing together representatives of science & technology parks, areas of innovation, innovation districts and technology-based incubators, academia, city policy makers, urban development experts, business leaders, entrepreneurs and innovative startups, IASP's 37th World Conference combined global perspectives with local insights, building a nuanced picture of the contribution made by innovation ecosystems around the world, as well as the challenges and opportunities facing them.

The Africa division participated in the "Around the world: STP & AOI conversations" sessions, with a panel focusing on regional issues that put our African division in a global context. Africa Division president Hauwa Yabani was also featured in one of our Quickfire Interviews: these were more light-hearted features, pairing STP/AOI managers from different countries so they could get to know each other and we could get to know them. With questions ranging from how they came to work in our industry, what they studied, their hobbies and interests. reflections on their own countries and their international experience, the interviews helped to break the ice and create a sense of community even when meeting in person wasn't possible.

ANNOUNCEMENTS IASP WORLD CONFERENCES: A LOOK BACK AND A LOOK AHEAD





Looking ahead to IASP Virtual 2021

We'll once again be meeting online for this year's World Conference, from 28-30 September 2021, to explore "Beyond disruptions and resets: the resilience of innovation ecosystems."

Resilience is the ability to cope with a crisis, and time and time again innovation ecosystems around the world have proved their remarkable capacity to do just that. As highly connected spaces filled with innovative people, they have demonstrated their ability to respond to challenges and adapt to rapidly changing conditions, continually innovating and supporting their local communities as we emerge from a year of crisis. We have seen unprecedented disruptions to the way we work and the way we live, and at IASP Virtual 2021, we'll be exploring the resilience of STPs and AOIs, the difficulties they faced, and how these unique communities got through hard times via innovation, adaptability and the capacity to connect.

Join us online to examine the mechanisms they use to turn adversity into opportunity, navigating the global disruption and resets of the pandemic to stay at the vanguard of change.

With knowledge sharing content from 14h-17h CEST on September 28th and 29th, pre- and postprogramme networking activities and exclusive content for IASP members on September 30th, it will be a great opportunity to catch up on the latest trends in our industry and to connect with your global colleagues.



PICTORIAL



From L-R: Konza Technopolis Development Authority (KoTDA) Chairman, Dr. Reuben Mutiso, Africa Digital Influencers Awards (ADIA) 2020 TV/Online Influencer of the Year winner Betty Kyalo, KoTDA CEO Eng. John Tanui and Kilome Member of Parliament (MP), Hon. Thaddeus Nzambia during ADIA 2020 awards ceremony at Konza Technopolis. The event, first of its kind in Africa, featured 20 categories and identified digital influencers who used their talents on digital platforms to inspire and impact the society positively in Kenya and Africa in the year 2020.



Workers at the ongoing Konza Technopolis. Konza is a key flagship project of Kenya's Vision 2030 economic development portfolio. Once completed, the hub will be a world-class city, powered by a thriving information, communications and technology (ICT) sector, superior reliable infrastructure and business friendly governance systems.



The ongoing horizontal infrastructure development at Konza Technopolis.

- Special Thanks:
 Abuja Technology Village FZ Co.
 Botswana Innovation Hub
 Konza Technopolis, Kenya
 The Innovation Hub, Pretoria

Publication of IASP Africa Division Email: iasp@iasp.ws