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AFRICA CONTINUES

AUGUST | SEPTEMBER 2020

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JAMES MWANGI

"MY VILLAGE OF NYAGATUGU WAS NOT ENOUGH TO SAY THAT I CONQUERED AFRICA."

How To Build A Billion-Dollar Banking Empire

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In 1993, Dr James Mwangi walked away from a promising career at one of Kenya's largest banks, to join the Equity Building Society. Three decades on, few could have predicted that his entrepreneurial leadership would work to transform not just Equity but the financial services of the region. FORBES AFRICA meets the man behind East Africa's billion-dollar banking empire.

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By Marie Shabaya



RWANDA'S TOP 5 DESTINATIONS

VOLCANOES NATIONAL PARK

Two and a half hours north of Kigali you will find Volcanoes National Park, home to most of the world's remaining mountain gorillas. Rwanda is among only three countries in the world where you can trek to see the majestic gorillas up close – a truly once in a lifetime experience.

LAKE KIVU

Kivu is one of Africa's Great Lakes, with deep emerald-green waters and a shoreline of magnificent mountains and fishing villages. The lake is dotted with uninhabited islands that can be explored by boat and provide the perfect location to relax and enjoy the peace of Rwanda's countryside.

NYUNGWE NATIONAL PARK

Nyungwe is one of the oldest rainforests found anywhere on the continent. The lush, green forest is home to over 300 bird species and 13 primate species including chimpanzees and

colobus monkeys. Take a stroll through the canopy along a 70m high walkway for exhilarating views of the rainforest.

AKAGERA NATIONAL PARK

Rwanda's largest national park is home to a diverse array of plant and animal life. The lakes, papyrus swamps, savannah plains and rolling highlands make Akagera an incredibly scenic reserve. The park is home to the elusive Shoebill stork, seven newly introduced lions, elephant, leopard and the shy but stunning roan antelope.

KIGALI

Rwanda's capital provides the perfect backdrop for a weekend getaway. As one of the safest cities in Africa, Kigali is quickly becoming a favourite for East African and international tourists. Savour the tastes of international cuisine at the city's best restaurants and enjoy live music at the many clubs and bars in Kigali.











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Temie Giwa-Tubosun supplies blood to hospitals and oxygen to Covid-19 patients in Nigeria. The special deliveries arrive with doses of compassion and hope.

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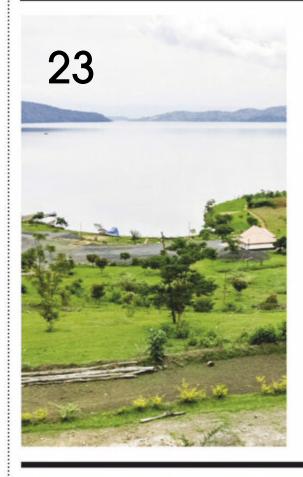
She has had a life of struggle and adventure, and even before being known as the mother of South African-born tech billionaire Elon Musk, was a star sashaying down the runway at the New York Fashion Week at the age of 67, rewriting the rules of the modeling industry. Maye Musk speaks to us from her home in Los Angeles about her new memoir,

A Woman Makes A Plan, released by Jonathan Ball Publishers, and how Elon was always her 'genius boy' and is now set on exploring Mars.

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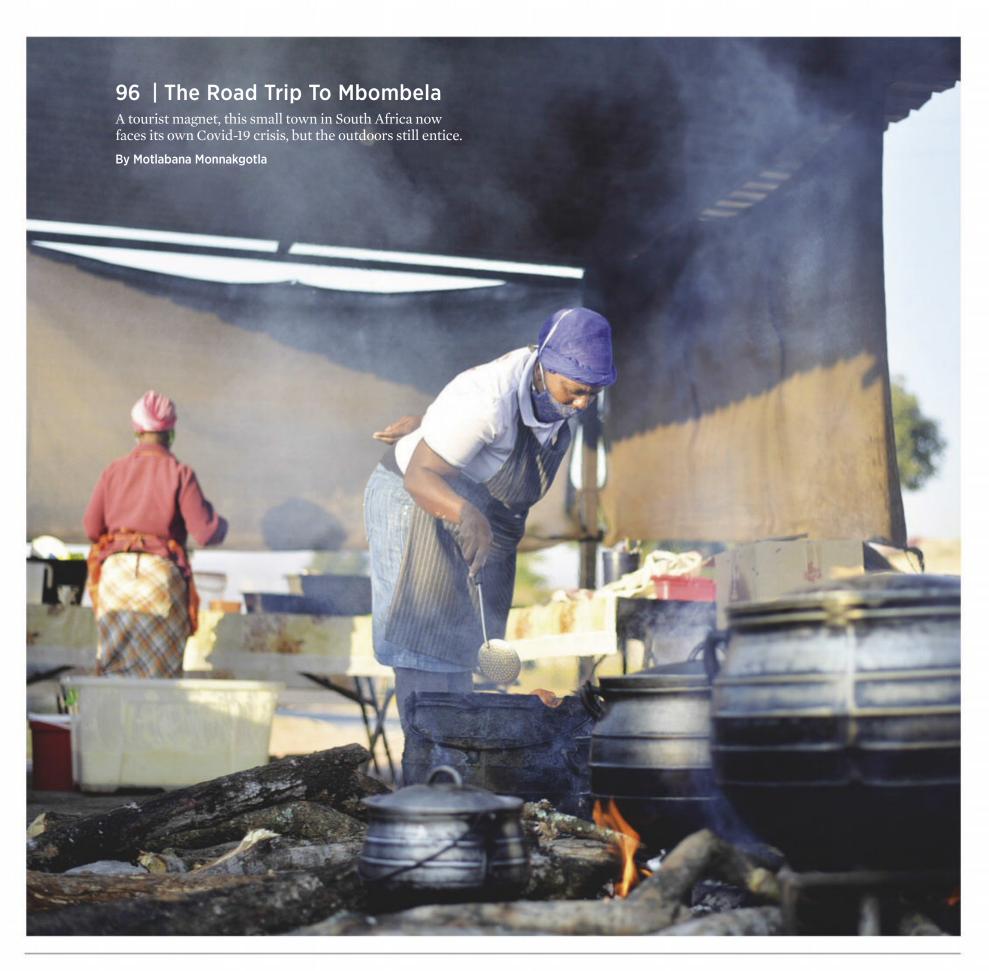
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He ran away from his circumstances in war-torn South Sudan. Today, this refugee athlete has crossed boundaries, broken barriers and has Olympic aspirations.

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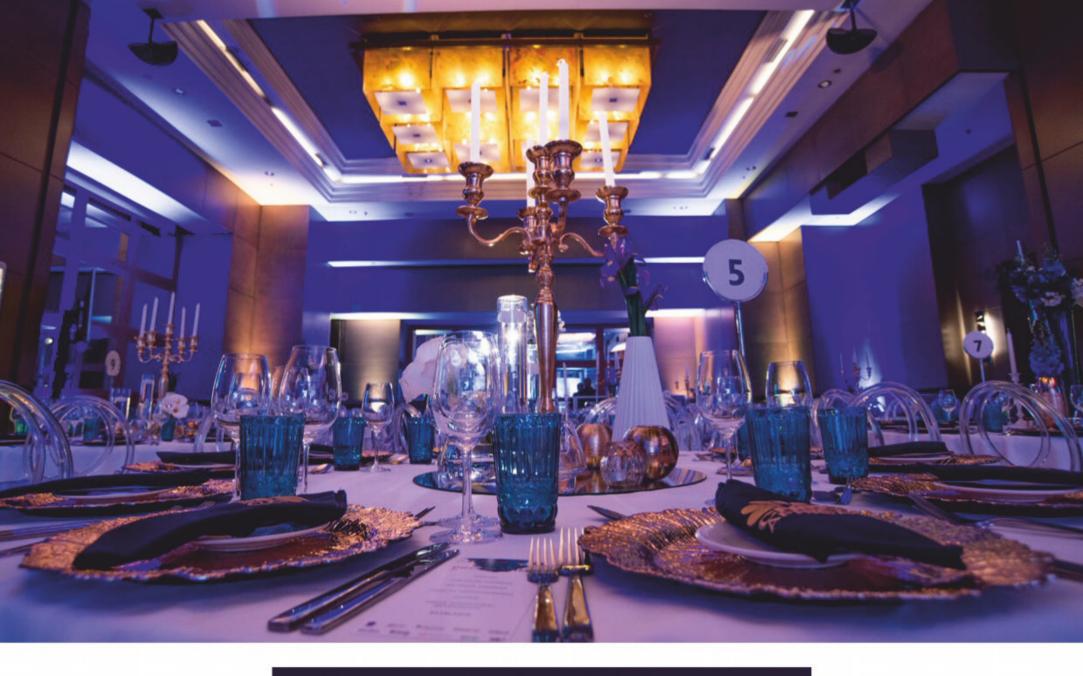
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The Handshake Is Officially Dead

ome THINGS ARE SO OMINOUS YOU JUST NEED to pay more attention to them.

My mind harks back to January when I met a family friend when on holiday in India and her two-year-old son kept wishing everyone: "Happy No Year!" And his mother gently chided his obvious mispronunciation of the word 'new', to the merriment of everyone in the room.

Only if we knew!

If forecasts are anything to go by, I can already see the likely headlines dominating December: 'Zero Sum Year' would possibly be one of them.

There is no way you can say it lightly – the last seven months have inordinately changed the course of human history. And who knows what awaits us in the next five, and beyond into 2021?

There is only one thing that seems to be constant, and that is the inevitable uncertainty of all that we are faced with.

And the fact that the pandemic has literally turned us into a planet of germaphobes.

We have built plastic walls between us, and the handshake is officially dead. So too the physical greeting and the healing touch of social conviviality that have kept cultures and civilizations going for centuries.

It's a scientific fact that the human touch releases oxytocin, a neuropeptide in the brain that plays an important role in social bonding and generating feel-good vibes. We instead live our days embracing the three new tenets of life – masks, hand-sanitizing and social distancing.

The ubiquitous face-mask has become the motif of survival, even as statisticians turn death and disease into dour data.

With infections steadily climbing, Africa Inc. takes a step back, with buttoned-up Corporate Africa retreating from offices, retooling homes and using 'Netflix' as a verb. And yet another tribe that might be phased out? Executives-on-the-move. As a former colleague of mine remarked on the new 'stay-at-home' reality – that "bad internet has become the new traffic jam".

As Africa's economies plunge further into recession, the business bottom line is but a dot on the horizon, even as enterprises and early adopters optimize current circumstances and desperately diversify and pivot.

And on this horizon, emerge the moon shots to the future.

And the biggest of them, The Vaccine – the elusive elixir that Big Pharma worldwide is working overtime to rustle up.

And amid all this, another looming reality – the inequality pandemic. The economic hardship due to Covid-19 is greater for women according to a World Bank report. In sub-Saharan Africa, their jobs in the informal sector are particularly at risk, and they also face greater risk of gender-based violence.

As South Africa celebrates Women's Month in August, we address the question in a story in this issue: is Covid-19 a gender pandemic?

With the economy in South Africa expected to contract by as much as 7%, the unemployment numbers will be staggering. Millions will be pushed into poverty and hunger, yet no one statistic can give us the full picture of the crisis. The only way is for multiple stakeholders, such as the government, financial institutions, corporates and NGOs, to keep stepping up to generate resources to resuscitate ailing health systems in what could well be a protracted pandemic. The communities across Africa too have an overarching role to play before all systems reach breaking point.

As we brace for one of the most defining moments in history and indulge in scenario-planning for what a post-Covid economy may look like, I am still hopeful for a miracle that could salvage what may otherwise become known as the 'Zero Sum Year'.

enu p

RENUKA METHIL, MANAGING EDITOR

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ioto by Motlabana Monnakgotl

FAITH, THAT BRIDGE BETWEEN DESPAIR AND HOPE; THAT ETERNAL BELIEF THAT ALL WILL BE WELL

BY RAKESH WAHI, FOUNDER AND PUBLISHER, FORBES AFRICA

HE LAST FIVE MONTHS HAVE BEEN SHROUDED in morbid disbelief of what has happened to the world. The World Health Organization's announcement on June 29 that the worst is yet to come, coincided with the global number of infections having gone past 10 million with almost 500,000 fatalities. It took three months to get to 2.5 million infections, an additional month to get to 5 million, 21 days for the next 2.5 million and finally 16 days for the last 2.5 million. There are a number of variables but it is conceivable that the world will have at least 5 million infections per week if a vaccine is not found fast enough. The other reality is that these are numbers based on what is being reported and the fact that testing is still being done very sporadically. In fact, the numbers may well be much higher. The other report that is concerning is that the RNA virus is likely mutating into different strands that may be more infectious and therefore could need more than one vaccine to deal with the pandemic.

There are rays of hope on the horizon that significant research is being carried out by pharmaceutical companies in collaboration with global multilateral organizations, financial institutions, disease control agencies and large foundations to find the silver bullet(s) that will save the world. It is estimated that over 150 vaccines are in pre-clinical and clinical evaluations with conflicting dates for a mass rollout to the public.

As these efforts continue, all is not lost and we must all play our part in contributing towards an outcome that will be less devastating. The most important role that can be played is keeping yourself safe and healthy, both physically and mentally. It is human to think that we are infallible but there is no one that is immune



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Money needs to be taken from the virtual world of trading to the real world of production of goods and services, not just to remove inequality but to provide basic sustenance. This mindset needs to change through ruthless policy reforms.

to this pandemic; anyone who is careless will cause harm. When the various lockdown measures were eased, people went back to being normal not remembering that the problem is far from over. It's important to bear in mind that the virus can relapse in those infected and if not careful, there are suggestions that you may get re-infected depending on your immunity. If you go about your work, keep your family safe by diligently taking the prescribed precautions, there will be lesser pressure on the healthcare system and lesser fatalities; it is therefore, time to act responsibly.

As humans, we rightfully have strong opinions; but there is a time for opinions and criticism and it is not in the middle of a battle; there will be time for retribution. There are some very competent people, in each country, who are represented in elected government and in healthcare, who are consulting with global agencies to provide short-and medium-term solutions to the problem. The number of variables are so many that no one has all the answers but they have a helicopter view of the problem and more importantly, authority on the resources; let them do their job. We have elected these leaders from amongst us; it is time to be a good soldier and follow instructions to the 'T'.

There are some outcomes that are going to be harder to deal with. The most serious one is managing unemployment. Staying under sustained lockdown is not viable, personally, or from an economic perspective; this has been witnessed all over the world and governments have had to find their own answers through trial and mainly errors. What works for one country most certainly may not work for another; no cookie-cutter solutions can be prescribed here. However, what is universal is the decline in economic activity.

In just five months, unemployment numbers have grown significantly; in the United States alone, the numbers are likely to exceed 50 million with an unemployment rate of over 30%. In South Africa, the unemployment is past seven million with about 350,000 job losses in the first few months of the year.

Rising unemployment is a vital sign of an economic catastrophe. Some sectors like travel, tourism, retail and hospitality have been completely annihilated by the pandemic. The impact from the decline in disposable income is devastating, it creates paralysis and feeds the vicious circle of uncertainty. The major stakeholders that can bring about reform are governments, financial institutions, multilaterals, multinationals and regulators. The easy steps were already instituted by making changes to free up much-needed cash from financial institutions and releasing bailout packages where they were needed most; this is great but will not be sustainable over a longer period of time. The listed companies are still worried about quarter-on-quarter

results and profits to shareholders. Self-serving stock traders with their infamous market instruments are still profiteering even though they produce and contribute nothing. Money needs to be taken from the virtual world of trading to the real world of production of goods and services, not just to remove inequality but to provide basic sustenance. This mindset needs to change through ruthless policy reforms. This to my mind is the greatest need of the hour.

Interestingly, two very important paradigm shifts were tested during the lockdown. The first was online learning in the education sector. A lot has been said about how online will completely disrupt the education business; as widely accepted now, this is unlikely to be the case. Preliminary research from some of our own students illustrates that virtual education will never be a substitute to a wholesome learning experience.

The online learning journey has a long way to go including the training of academic staff, class sizes, curriculum design, and interactivity of platforms as well as assessment of learnings; which is the final tested outcome. In a majority of African countries, online learning is still at a stage of infancy with poor connectivity, high data costs and lack of computers.

The second change is the future of the work environment. Even at my age, the transition was very spontaneous. The office work environment is going to evolve for the better in most industries. Through our IT business in Asia, we witnessed the adverse impact on businesses that resisted or delayed transformation. The future will require secure and ubiquitous connectivity with your work and irrespective of where the data is stored, the real evolution is in ensuring that information is accessible at all times. Work spaces will be rationalized in the coming years as people will be given more autonomy with accountability and have the flexibility to choose how to deliver their key performance indicators (KPIs). What is yet to be conclusively developed is the accurate tracking and management of deliverables and outcomes particularly in qualitative responsibilities. Closely tied to this is the changes in labor laws that will need to be unbundled with a 'not one size fits all' approach to employeremployee relationships.

We all believe that in times of crisis, we search deep into ourselves for the inner strength and resolve to take us through. When you do not see a path ahead, you need to have faith that all will be well. Faith is the bridge between despair and hope; that eternal belief that irrespective of the challenges, all will be well.

In the words of one of my favorite authors, Alexandre Dumas: "There is neither happiness nor misery in the world; there is only the comparison of one state with another, nothing more. He who has felt the deepest grief is best able to experience supreme happiness. We must have felt what it is to die that we may appreciate the enjoyments of life... Live, then, and be happy, beloved children of my heart, and never forget, that until the day God will deign to reveal the future to man, all human wisdom is contained in these two words, 'Wait and Hope'."



BILLIONAIRE RAPPER KANYE WEST TO RUN FOR PRESIDENT

As Americans celebrated Independence Day on July 4, rapper Kanye West took to Twitter to announce that he will be taking on Donald Trump for the United States presidency in November 2020.

"We must now realize the promise of America by trusting God, unifying our vision and building our future. I am running for president of the United States! #2020VISION," he announced.

The newly-crowned billionaire, worth \$1.3 billion according to *Forbes*, first brought his intention to run for president back in 2019 during the Fast Company's Innovation Festival, saying he'd do so in the year 2024.

Elon Musk, the South African-born CEO of SpaceX, endorsed West expressing his full support for the rapper.

West was then heard to have dropped out of the presidential race after a political advisor believed to be close to him told *New York Magazine*, however, the billionaire rapper has filed new federal election documents for the 2020 presidential run and has officially made his way on to the Oklahoma ballot.

UV TO CLEAN PLANES

As the global airline industry prepares for lift-off after lockdown restrictions around the world, aircraft manufacturer Boeing is currently evaluating promising research regarding ultraviolet (UV) disinfection of its planes. Applications such as UV wands and persistent UV could be used to safely and quickly clean high-touch surfaces in airplane interiors, said a report the Illinois-based The Boeing Company released in June titled, 'Working together to ensure a confident global return to flight'.

An emerging technology harnesses a section of the ultraviolet spectrum (222UV) that appears to be safer, faster and more effective at disinfection, it added.

AFRICA'S FIRST COVID-19 VACCINE TRIAL

South Africa's University of the Witwatersrand (Wits), in collaboration with Oxford University and the Jenner Institute at Oxford University, has begun the continent's first clinical trial for a Covid-19 vaccine. Leading the South African ChAdOx1 nCoV-19 Vaccine VIDA-Trial is Shabir Madhi, Professor of Vaccinology at Wits University and Director of the

South Africa Medical Research Council (SAMRC)

Vaccines and Infectious Diseases Analytics Research Unit (VIDA).

"This is a landmark moment for South Africa and Africa at this stage of the Covid-19 pandemic. As we enter winter in South Africa and pressure increases on public hospitals, now more than ever, we need a vaccine to prevent infection by Covid-19," said Madhi at the launch in June.

The participants, numbering around 2,000, will be followed for a whole year and the results will be analysed intermittently.





Dexamethasone has been hailed as a breakthrough treatment in the fight against Covid-19.

It has been found to be able to save the lives of Covid-19 patients, scientists at the University of Oxford in the United Kingdom said in June.

The World Health Organization welcomed the initial clinical trial results that showed the corticosteroid can be life-saving for patients who are critically ill with Covid-19. For patients on ventilators, the treatment was shown to reduce mortality by about one third, and for patients requiring only oxygen, mortality was cut by about one fifth, according to preliminary findings shared with WHO.

"This is the first treatment to be shown to reduce mortality in patients with Covid-19 requiring oxygen or ventilator support," said Dr Tedros Adhanom Ghebreyesus, WHO Director-General. "This is great news and I congratulate the Government of the UK, the University of Oxford, and the many hospitals and patients in the UK who have contributed to this life-saving scientific breakthrough."

South Africa's pharma giant
Aspen, which produces the
60-year-old drug, manufactures
both its injectable and tablet
forms, mainly used for treatment
of tumours, asthma and other
respiratory ailments. Stephen
Saad, Aspen's chief executive, said
in a *Reuters* report in June that
the company has the necessary
capacity to meet the demand.



MELINDA GATES ON THE PANDEMIC'S GENDER TOLL

In July, Melinda Gates launched a paper exploring how the Covid-19 pandemic has exploited pre-existing inequalities and drastically impacted women's lives and livelihoods. In the paper, titled *The Pandemic's Toll on Women and Girls*, she makes the case that to recover fully from this pandemic, leaders must respond to the ways that it is affecting men and women differently. Gates describes how previous disease outbreaks, including AIDS and Ebola, tend to exploit existing forces of inequality, particularly around gender, systemic racism, and poverty.

In Africa, for example, women account for around 40% of Covid-19 cases. However, African women and girls are disproportionately affected by reduced access to healthcare services and are at greater risk of gender-based violence.

In June, the Seattle-based Bill & Melinda Gates Foundation announced a five-year, \$1.6 billion commitment to Gavi, the Vaccine Alliance, to deliver life-saving vaccines to the world's poorest countries.

GLOBAL PEACEFULNESS FALLS

The 14th edition of the Global Peace Index from the international thinktank the Institute for Economics & Peace (IEP) states with regard to Covid-19, that globally, Italy, Greece, Latvia and Poland are amongst countries least likely to weather the pandemic well due to economic challenges and poor performance on 'social resilience', while Norway, Australia and New Zealand are best placed to handle the future.

The world's leading measure of global

The world's leading measure of global peacefulness reveals that in 2020, the average level of global peacefulness deteriorated for the ninth time in 12 years.

Iceland remains the most peaceful country in the world, a position that it has held since 2008.

It is joined at the top by New Zealand, Austria, Portugal and Denmark. Afghanistan remains as the least peaceful country, a position it has held for two years, followed by Syria, Iraq and South Sudan.

Special research by the IEP shows Covid-19 is negatively impacting peace across the world, with nations expected to become increasingly polarized in their ability to maintain peace and security.

This reflects the virus' potential to undo years of socio-economic progress.

CFOS CONCERNED ABOUT GLOBAL ECONOMY

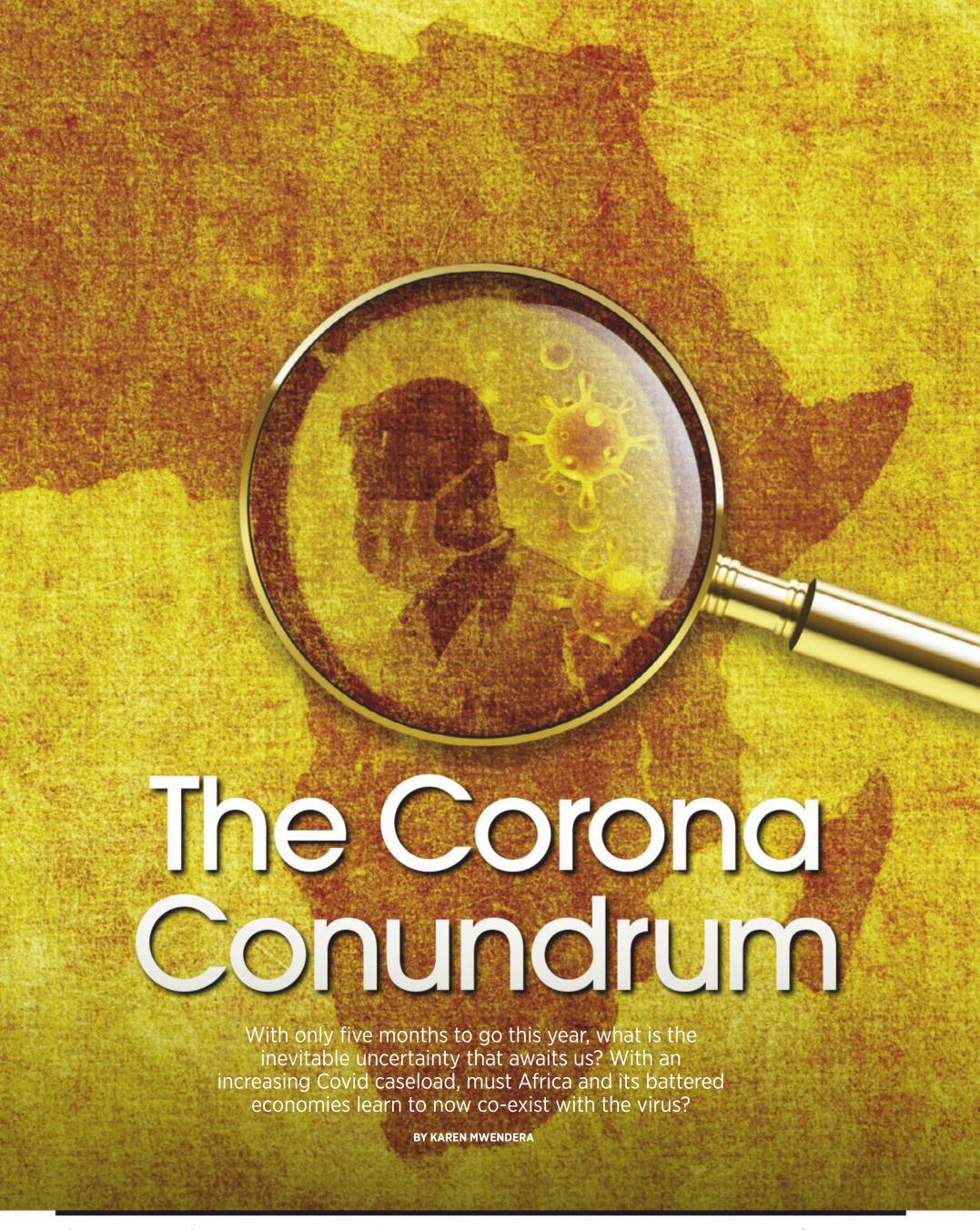
PwC's latest Covid-19 CFO Pulse Survey reveals that CFOs are most concerned about the effects of a global economic downturn (Africa: 51%; Global: 60%), the possibility of a new wave of infection (Africa: 39%; Global: 58%), and the financial impact on their businesses (Africa: 59%; Global: 47%). However, they are very confident that they would be able to respond effectively to a new wave of infections. Since March 2020, PwC has been tracking sentiment and priorities among finance leaders about the Covid-19 outbreak About the Covid-19 outbreak.
Says Dion Shango, CEO of PwC
Africa: "The findings of our latest survey suggest companies are increasingly getting to grips with conducting business in this uncertain environment. Concerns over a loss of productivity due to remote working conditions have declined — from 45% in May to 27% in June among African CFOs. At the same time, opportunities to innovate are rising, with about half of respondents (Africa: 49%; Global: 50%) saying they're finding new ways to serve



395 MILLION JOBS BY 2030?

The Covid-19 pandemic has caused unprecedented job losses and economic uncertainty. As governments and businesses look to stimulate growth, a new study from the World Economic Forum (WEF) has found that 'nature-positive' solutions can create 395 million jobs by 2030. The Future of Nature and Business Report provides blueprints for businesses to tap into a \$10.1 trillion business opportunity, focusing on industry actions that are nature-positive, meaning that they add value to nature.

In other news, 'The Great Reset' will be the theme of the twin summit to be convened by WEF in January 2021.



ITH THE WORLD ENTERING THE second half of the year, there simply seems to be no let-up in the number of Covid-19 cases even as global experts suggest the worst is vet to come.

As of July, at the time of going to press, globally, there has been over 15 million confirmed cases of Covid-19 with more than 600,000 deaths. These are alarming statistics.

Speaking from Geneva, in June, World Health Organization (WHO) chief Tedros Adhanom Ghebreyesus insisted we're not out of the woods yet.

"Although the situation in Europe is improving, globally, it is worsening," he warned.

With North America having, cumulatively, the highest incidence of Covid-19, globally, with over six million infections, Africa is at the bottom of the ranks, comparatively, with almost 600,000 confirmed cases as of July. But with fastsurging figures, the impact of the virus on the continent continues to have dire effects.

"Looks like the months of July and August will be the most devastating in terms of new cases and deaths," says Dr Titus Divala, a medical doctor and epidemiologist based in Malawi.

This spike in cases will no doubt worsen the current burden on Africa's already ailing public health systems, and in particular, will limit the attention on all other diseases such as HIV/AIDS, malaria and tuberculosis.

As a result, this may lead to an unprecedented increase in preventable death, which Divala calls "Covid-19 collateral damage".

In July, WHO acknowledged there was evidence emerging that Covid-19 is airborne. However, the organization emphasized that more research was "urgently needed". Airborne transmission means that new infections could accelerate farther and faster.

"Until now, airborne transmission has never been on the cards. Our understanding from Chinese Covid-19 transmission dynamics data, supported by a body [of] evidence from SARS, MERS, and [previous] coronaviruses has always been that the virus spreads [via] droplets which are way bigger than aerosols [necessary for airborne transmission]," Divala says.

Experts like him caution that the emerging evidence

must be taken seriously to re-orient prevention messaging before it's too late. Particularly in Africa, where many socioeconomic issues exist.

The Africa Covid-19 Community Vulnerability Index (Africa CCVI), developed by American development body, Surgo Foundation, outlines the 10 most vulnerable regions across the continent, identifying hotspots in six countries. They include the Democratic Republic of the Congo, which has four of Africa's most vulnerable regions, and then, Malawi, with two, along with Ethiopia, Uganda, Cameroon, and Madagascar. In South Africa, hospitals have been unable to accommodate the high numbers. The country's health minister, Zweli Mkhize, in a virtual address in July, warned hospital beds were expected to reach peak capacity due to the sheer volume of patients.

However, he noted that the Department of Health was

working on a solution and is "implementing the Surge Strategy [in] anticipation of the peak", adding that they have already, as of July, re-purposed 27,467 beds and increased capacity to 40,309 beds.

Mkhize also announced that South Africa was approaching a peak in Covid-19 cases; making it one of the world's top hotspots for the virus.

By the third week of July, the country recorded well over 350,000 cases and 5,000 deaths with 180,000 recoveries. However, as the numbers climb, can South Africa, the continent's second biggest economy, really afford to further tighten its lockdown

restrictions?

There are myriad unanswered questions: how long before a vaccine is developed?

At the University of the Witwatersrand in Johannesburg, Shabir Madhi, Professor of Vaccinology, says Africa may likely see a Covid-19 vaccine in the first quarter of 2021.

In July, Madhi, who is also leading a vaccine trial at the university, told Reuters that the 'ChAdOx1 nCoV-19' experimental vaccine is one of 19 currently being tested on humans, globally. The vaccine is also being trial-ed in Brazil by scientists from Oxford University in the United Kingdom

While trials are still in the early stages, business must go on. The second half of 2020 may see more firms attempting to return to normal operations.

In terms of the education sector, South Africa has decided to continue with the academic year with some pupils going



Looks like the month of August will be the most devastating in terms of new cases and deaths.



back to school as others continue classes online.

In July, via Presidential Address, Kenya announced that the 2020 academic year has been completely lost. Schools are expected to resume only in early 2021.

In terms of industry, the challenge that remains is how to rebuild business over the next few months. All businesses will need to become more agile while adopting new technology and online marketplaces. But there are opportunities in the chaos and Covid-19 has accelerated change in building a new reality and navigating the risks as the pandemic rages on.

Undoubtedly, Covid-19 may be with us longer than we anticipate. However, there is hope that African experts will offer new solutions on how to co-exist with the virus, minimize transmissions, and keep our economies and societies running. For now, corporate Africa is preparing itself.

Tshandu Ramusetheli, a Senior Specialized Finance Transactor at Investec in Johannesburg, reiterates that to co-exist with the virus, businesses will need to re-engineer their offerings and adapt to new ways of doing work.

"Most companies (in the services sector) are



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The effect of this is that employees tend to be more productive working from home. Smart employers will capitalize on this and introduce employee incentives for productivity, such as flexi-work where employees work four business days out of five.

- Tshandu Ramusetheli



realizing that their employees can work effectively from home. The downtime that employees would have spent traveling to and from work, coffee breaks in the office, lunches, and general 'chats around the floor' have all been replaced by employees spending more uninterrupted time in front of their computers in the comfort of their homes," he says. "The effect of this is that employees tend to be more productive working from home. Smart employers will capitalize on this and introduce employee incentives for productivity, such as flexi-work where employees work four business days out of five."

With more focus on the home, hospitals are also now gearing towards the home-based model of treatment for milder cases. FORBES AFRICA 30 Under 30 entrepreneur and list-maker Ogutu Okudo from Kenya resorted to exercising and making her own home-based treatments when she tested positive for Covid-19. She ate foods such as onion soup, wasabi, fruits, and took Vitamin C. In five days, she had fully recovered and got tested again with negative results.

"They say corona isn't 'real' until you know someone who has gone through it, and in my case, that person happened to be me," she tells FORBES AFRICA. With nations exiting lockdowns and lifting restrictions around the world and Covid-19 continuing on its unwavering rampage, the second wave of the pandemic may soon be upon us. The question is: how much longer before a well-conceived tested cure that is available to all? •

THE FUTURE JUST ARRIVED: THE ROLE OF BANKS IN A POST-COVID WORLD



Kweku Bedu-Addo, CEO of Standard Chartered Bank South Africa & Southern Africa

HE COVID-19 GLOBAL
pandemic has brought forward
the future. It has brought about
humanity's biggest challenge in
a century, to choose between life and livelihoods. In the immediate aftermath of the
pandemic, banks have played a supporting
role to clients and communities. Standard
Chartered announced a commitment of
US\$1 billion globally to support companies in the health delivery supply chain to
combat the COVID-19 pandemic, and an additional US\$50 million to assist communities
in presence markets, especially Africa.

Generally, banks have entered the COVID crisis much stronger and resilient than they did before the global financial crisis of 2008. This resilience is owed in part to the raft of regulatory reforms and stronger supervision since 2008, aimed at ensuring adequate capital and liquidity buffers against market-wide stress and also to avoid future taxpayer bailouts. Bank resilience notwithstanding, there is a catch! Well, several!

Many jurisdictions have placed fighting this pandemic at par with war by employing emergency measures and massive fiscal stimulus packages to provide relief to businesses and households and hopefully to bring the public health crisis under control. Relative to Q1 2020, total lockdown is now perceived as a blunt instrument in responding to the pandemic due to its potential for economic destruction and jeopardizing livelihoods. There is some convergence of views towards recalibrating easing of lockdown alongside placing high emphasis on both corporate and individual responsibility to obey public health recommendations and to observe good hygiene.

As the world emerges from lockdown, the nature and shape of the recovery is an important variable. Whether the recovery is a V-shape, U-shape or a W- shape makes a world of a difference to how banks will respond. We are only beginning to understand and measure the true economic cost of the pandemic, transmitted through lockdown and the deleterious effects on growth and the viability of some sectors. Many companies around the world face the grim prospect of possible collapse, necessitating tough survival decisions on rationalizations, write-downs of asset values and other corporate actions.

National governments need to determine the right balance between restarting economic activity and growth without compromising the capacity of healthcare infrastructure. The ability to do so would in turn influence the nature and shape of the recovery as well as which companies or sectors can survive the new reality, and which would fail. Then there is digitization. Digitization and the new ways of working will define who stays competitive, productive and can survive. Almost every sector or industry and even governments will need to invest in digital

solutions to future-proof their survival and relevance.

While banks certainly have a critical role to play during and post crisis, the reality is there is no certainty or clarity on how events might unfold. In the meantime, a better understanding of the nature, virulence and measures to conquer the invisible enemy remains elusive, thereby drawing parallels with the expression "fog of war". The unfolding challenges and after-effects of the pandemic are not sequential or in any particular order. Neither will the responses be. Responses need to be diligent, intelligent and wise in order to safeguard the future. The pre-COVID bank resilience is a necessary and comforting condition but insufficient for post-COVID recovery unless banks themselves can successfully navigate the fog of this new war to avoid joining the casualty list that is beginning to grow around the world. They will certainly be dealing with elevated credit risk, strains to capital and liquidity and heightened operational and cyber security risk, among others.

Livelihoods and economic security look fragile in the short run as the pandemic exposes cracks, fissures and chasms in the existing socio-economic order globally. This systemic stress could precipitate a repurposing of legacy political, economic, social and security arrangements by national governments which could be consequential to businesses recovery and viability, household incomes and social cohesion. For the banks, it becomes a waiting game!



Land Of A Thousand I D E A S

In many ways, Covid-19 has been Africa's 'light bulb' moment. As an example, a roundup of the new wave of pandemic-inspired innovations being tried and tested in the marketplace in hilly Rwanda.

BY TESI KAVEN

their depleting arsenal to creatively respond to the raging pandemic as also deploy new ideas to tackle it, in many ways, Covid-19 has been Africa's 'light bulb' moment.

The new wave of innovations on the continent has seen governments, universities, corporates and small business rally together to come up with rejigged solutions and find effective ways to combat the crisis. In Rwanda, the 'land of a thousand hills' known for its tech startups and encouragement of new enterprise, a raft of new ideas are emerging, from clever face masks to ventilator machines, and food delivery apps to contact tracing apps and robots. We examine a few:

Drones as loudspeakers?

With 30 employees and operating in six different countries in Africa, Eric Rutayisire's drone company, Charis UAS, has worked on a number of projects in Rwanda, including spraying pesticides using drones on sites to quell mosquito breeding and malaria.

However, some of these projects came to a screeching halt when Covid-19 struck.

"Certain projects that were meant to kick off had to be stopped and we lost some revenue," Rutayisire tells FORBES AFRICA.

The CEO says that he and his team had to quickly come up with an innovative way of joining the fight against the pandemic. They saw an opportunity to improve communication systems during the country's total lockdown period.

"We identified gaps in the way information regarding the

disease and the restriction guidelines was being passed to the community. The police would drive around in vehicles with loudspeakers communicating to people. So we approached them with the idea of using drones," Rutayisire says.

The police quickly bought into the idea seeing as it would help limit human contact whilst also reach more people.

For this, the drones had to be slightly modified.

"We fitted the drones with megaphones and built a communication system that linked them to the police



We fitted the drones with megaphones and built a communication system that linked them to the police walkie-talkies, enabling them to broadcast messages from wherever they were.

- Eric Rutayisire, Charis UAS

walkie-talkies, enabling them to broadcast messages from wherever they were."

Three to four drones would be dispatched daily to various far-flung districts in Rwanda, with each drone operated by a team of two people.

Did the company make any profit for this new venture? "Our goal was not to make profits but to support the Rwandan government in the fight against this pandemic. Our company got increased visibility, but that was not our main goal," says Rutayisire.

The use of drone technology in the fight against the coronavirus is not unique to Rwanda. Countries such as China used drones for crowd control whilst Australia developed a 'pandemic drone' to remotely detect and monitor individuals with infectious respiratory conditions.



The new face of business; at FabLab

Face shields as virus-busters

Never before has a commodity risen from 'obscurity' to becoming one of the world's most coveted items of clothing. Face masks have instantly gone from exception to norm, and is the facial armor in the fight against Covid-19.

When the first case of Covid-19 was reported in Rwanda and it became apparent that masks would be essential in curtailing the spread, local garment manufacturing companies, and even neighborhood tailors, rose to the occasion to produce an array of masks to meet the rising demand.

Fabrication Laboratory, commonly known as FabLab Rwanda, which helps young innovators in the country turn their ideas into products, specifically in the hardware and electronics domain, saw an opportunity to produce a different kind of personal protective equipment – face shields.

According to FabLab's General Manager, Danny Bizimana, his team decided to take a route that no one else in the country had taken before.

"There were too many textile companies in the country producing the face masks, so we decided to do the face shields because we knew that Rwanda ships them from China and they would soon be in short supply," Bizimana explains.

Luckily for FabLab, the materials to manufacture the face shields are locally available.

"We chose simple, locally-available material to ensure that the production of the face shields can be sustained even through long periods of border closures."

The company has been producing 500 face shields per day but with the re-opening of the economy, this number has risen.

"Our main clients were doctors, surgeons and dentists. However, now that the hospitality industry is operational, we are now supplying the face shields to hotels and have increased our production capacity to 700 units per day," Bizimana says.

FabLab initially produced the face shield as its contribution to the national fight against the pandemic, but as demand for the product has been steadily growing, the company is now making profit. The mask economy is here to stay, with a study from Stanford University indicating that they are a crucial step in reopening the economy and can help ensure public safety in a post-Covid world.



Our main clients were doctors, surgeons and dentists. However, now that the hospitality industry is operational, we are now supplying the face shields to hotels and have increased our production capacity to 700 units per day.

– Danny Bizimana, GM,
FabLab

Locally-made ventilators

With the Covid-19 pandemic causing an unimaginable strain on health systems, one particular medical equipment has been in short supply – the ventilator machine.

The machine helps critically-ill patients who cannot breathe on their own, and is literally the difference between life and death for Covid-19 patients with acute respiratory complications.

So dire was the shortage that in Italy, which was Europe's center of the Covid-19 outbreak, doctors were forced to make the difficult decision about who uses the ventilator machines and who doesn't, even as Covid-19 patients flooded hospitals.

Rwanda, like most other African countries, only has a few of these lifesaving machines, which are imported and cost anywhere from \$25,000 and \$50,000 apiece.

It is against this backdrop that biomedical engineers at the Integrated Polytechnic Regional College Kigali (IPRC) resolved to make them. According to IPRC Kigali Principal Engineer Diogène Mulindahabi, the biomedical engineers partnered with doctors at some of the local hospitals to develop a prototype.

"Within eight days, the team developed a prototype called Rwanda Emergency Ventilator (REV001) using locally-available materials. The machine they made met the minimum requirements for a patient ventilator," says Mulindahabi.

The team of engineers also developed a second portable emergency ventilator prototype (REV002), which can be used in an ambulance.

"Since these are sensitive equipment to be used on the human body, we have to ensure they meet the required standards. We cannot afford to make mistakes. So the prototypes are going through a rigorous certification process," says Mulindahabi.

The team at IPRC Kigali knocked on several doors in search of funds and managed to receive \$20,000, which will be used to finalize the second version of the prototype. The institution is however still open to receiving more support that would go a long way in the mass production of the ventilators. But what will the final product cost once it hits the market?

Between \$4,000 and \$5,000.

"The country will save millions of dollars and have a locally manufactured product that works just as well as the imported ones. We also hope to take this product to other countries in the region," says Mulindahabi.

Rwanda is not the only African country to have manufactured its own ventilators.

A team of students from Kenyatta University in Kenya also devised a ventilator machine that has met the standards of the International Organization for Standardization (ISO).

Ghana and Uganda have also joined their African counterparts in taking the lead to produce home-grown ventilators.



Rwanda will save millions of dollars and have a locally manufactured product that works just as well as the imported ones. We also hope to take this product to other countries in the region.

– Diogène Mulindahabi, IPRC
Kigali Principal Engineer



Devising homegrown ventilators

Blue-eyed caregivers

In an age of social distancing, robots are now increasingly being used as frontline health workers in hospitals across the globe.

A study published in *Science Robotics* states: "Robots have the potential to be deployed for disinfection, delivering medications and food, measuring vital signs, and assisting border controls. As epidemics escalate, the potential roles of robotics are becoming increasingly clear."

In partnership with the United Nations Development Programme, the Rwandan government acquired and deployed five smart antiepidemic robots for use in two Covid-19 treatment centers and at the Kigali International Airport.

The blue-eyed robots, acquired through ZoraBots Africa Ltd, have Rwandan names such as Ikizere (hope), Ingabo (shield), Urumuri (light) and Akazuba (sun) that depict the country's spirit and values.

The mobile robots also feature functions such as facial recognition, temperature screening, the ability to monitor patient status as well as save medical records.

According to Benjamin Karenzi, CEO of Zorabots Africa, the information collected by the robots can be used to inform policymakers in case of future pandemics.

"The robots are able to capture and store all manner of data and this data can be used by decision-makers even in the future in case such a crisis reoccurs," Karenzi said during an interview with *CNBC Africa*.

The pandemic has surely brought forth the crucial role of robotic technology and its power to safeguard and improve human lives. The fourth industrial revolution is surely here.



Contact tracing app

After the partial lifting of the lockdown, restaurants, hotels and businesses such as salons in Rwanda were instructed by the government to record the basic details of their clients such as names and phone numbers. This information would then be used to trace those who might have come in contact with infected patients.

This sparked an idea in Nkurayija Ishimwe Jean Hubert, Founder and CEO of Favouriapps Ltd, a software development company specializing in mobile applications, for a digital solution.

"The idea to record the data was noble but the method used was archaic. I saw an opportunity to create a digital application that would store the data," says Hubert.

It took him five working days to come up with the app, complete with safety features to ensure the data was safe from hackers.

The next step was to get the right people to look in his direction. He took to Twitter.

Much to his delight, Rwanda's Minister of ICT and Innovation, Paula Musoni, replied to his tweet asking him to send his ideas on email.

Hubert says he is now in talks with the ICT ministry. If approved, the app can be

used at banks, supermarkets, restaurants and commercial buildings to digitally record the data of every person that comes through the doors.



The idea to record the data was noble but the method used was archaic. I saw an opportunity to create a digital application that would store the data.

Nkurayija Ishimwe Jean
 Hubert, Founder and CEO
 of Favouriapps

Ed-tech platform

Like many other industries, the education sector has not been spared by the devastating effects of the Covid-19 pandemic.

School compounds, which were abuzz with activity in January this year, stand deserted with an eerie silence. Others have been turned into Covid-19 quarantine centers even as learners, from primary school to universities, remain home.

Thankfully, there are now a number of free or low-cost, user-friendly digital communication tools that allow for a range of remote learning solutions.

Launched in Kenya in May this



We did not want to reinvent the wheel, but just wanted to create a platform that was easy to use and would give the clients, whether sixyear-olds or university students, a pleasant learning experience.

James Njugi, Co-founder,
 Manager, Partnerships and
 Strategy, Kikao



year, ed-tech platform Kikao, which is Swahili for 'an important meeting', is slowly gaining traction.

According to James Njugi, Co-founder, Manager, Partnerships and Strategy at Kikao, the platform was birthed out of the need to provide solutions that were simple and affordable.

"We did not want to reinvent the wheel, but just wanted to create a platform that was easy to use and would give the clients, whether six-year-olds or university students, a pleasant learning experience," Njugi tells FORBES AFRICA.

So far, Kikao is being used by university students in Kenya, three civil service entities as well as Kenya's National Defence College.

On the future of e-learning with schools slowly re-opening, Njugi says: "We cannot go back to how things used to be pre-Covid. The pace of learning has increased and knowledge is quickly increasing and learners, young and old alike, have been exposed to the numerous possibilities [of] ed-tech. E-learning should not be side-stepped in the post-Covid world, instead, it should complement the conventional learning methods."

When all is said and done, how can this wave of innovation be sustained in the post-Covid world?

Robert Ochieng, CEO and Co-founder, Abojani Investment, Kenya, who is an expert on financial markets, innovation and technology, says that innovations need to leave the labs and hit the markets.

"An idea that has not been tested in the market remains just that: an idea. we need to focus on testing the innovations in the marketplace and making sales, that way, innovators will be encouraged to do more as they see their inventions put to good use," says Ochieng.

He is also of the opinion that governments should increase their budget allocation for science, technology and innovation.

"African governments should increase funding for research and development to at least 1% of their national budgets and target to grow this to 3% over time. There is a direct correlation between investment in research and development at national level and the growth of GDP. This kind of vibrancy has seen the rise of tech innovation in countries like Israel," Ochieng concludes. •

Tourism is slowly reawakening in Rwanda, with a renewed focus on the local market.

T'S A QUIET, WARM afternoon in June at Rwanda's iconic, otherwise busy Kigali Convention Center (KCC). The conference venue's paved parking lot that's normally teeming with cars, is grey and empty against the backdrop of the green hills. Inside the KCC's domed facility are 18 venues that can host more than 5,000 delegates at any given time. All of them are painfully silent, just like the five-star Radisson Blu hotel next to it.

This is the first time it has been as quiet since its opening in 2016. The KCC resumed operations on July 1 after the easing of lockdown restrictions, but overall, the MICE (meetings, incentives, conferencing and exhibitions) industry in Rwanda was to host close to 147 events this year targeting a revenue of

\$88 million. Most of these have been postponed or canceled. The highlyanticipated 26th Commonwealth Heads of Government Meeting, for instance, originally scheduled for June 22-27 and that would have brought together more than a thousand business and government leaders from The Commonwealth to Kigali, has been postponed to June next year.

BY STEVEN MUVUNYI

Five kilometers from the KCC, commercial passenger services at the Kigali International Airport that had been suspended are now slowly resuming, with national airline RwandAir announcing flights to select African routes and Dubai from August 1.

Rwanda recorded its first case of Covid-19 in mid-March and was one of the first few African countries to impose



a strict and complete lockdown. As everywhere else, this has spelt bad news for the country's leisure and business tourism sectors.

Take Ntende Hotel, a two-star facility owned by a 3,700-member cooperative of rice farmers called Coproriz. The cooperative's members collected money to build the facility in Gatsibo district in the country's Eastern Province in 2018. The hotel's proximity to the Akagera National Park made it a big drawcard and all was well until Covid-19 changed everything.

James Karangwa, the hotel's Investment Department Manager, explains that the outbreak resulted in the hotel suspending operations but it continued paying contracted staff and other fixed expenses. An even heavier burden was the repayment of a bank loan. A disheartened Karangwa says: "Having to meet such obligations whilst inoperative has affected us a great deal."

Karangwa explains that, thankfully, the negative impact of the hotel business was cushioned by the group's agri-business which was relatively less affected in the pandemic.

"The consequences would have been disastrous if we had not diversified our portfolio by investing in the cultivation of rice, maize and soya."

The tourism and hospitality operators had been enduring the pain of Covid-19 since January, when the news about the virus first broke globally.

"There were already fears over the virus in January and many travelers cancelled their bookings while those that were here rushed back home to avoid being stuck," recalls Wilson Habimana, founder of Wilson Tours and Travel Agency Ltd in Kigali. Of the 16 people his company employed before the outbreak, only four remain now.

"We have had a lot of cancellations from clients while others want their money back, hence, we had to do refund both for tours and tickets, which hasn't been easy, as this pandemic caught the world unawares and it's like most of the clients have lost the hope of traveling because of fear," says Buwule Anna Fridah, a tour consultant, to FORBES AFRICA.

"As workers in the tourism industry, we have been affected by this pandemic because the source of our income has been closed," concurs Ismael Nsengiyumva, a driver-guide, adding that investing in sectors other than tourism is one of the lessons he has learned from the crisis.

The pandemic has especially been a burden for new facilities such as the Epic Hotel & Suites in Nyagatare district, in the Eastern Province of Rwanda. The four-star property opened in 2018; today, most of its workers have been sent home as the pandemic rendered them redundant.

"Since the lockdown, we certainly got affected; as most hotels, we had to lay off a large number of our workers. We came up with a policy to maintain the hotel in a semi-functional state because closing it would cost us a lot more [than] to restart," says the chairman of its board, Alfred Ndabarasa. However, he expresses the hope of a recovery.

"The reopening of tourism and hospitality activities is helpful and we are gradually bringing our staff to work. Hopefully, by September, a big number would have returned to work if this problem does not persist."

On June 16, a cabinet resolution that shone a glimmer of hope for the tourism and hospitality industry was released. "Domestic tourism and international tourism for visitors traveling [on] charter flights will resume," read part of the statement. The government encouraged hotels to participate in domestic tourism promotion and offer conference services while adhering to strict health guidelines.

Earlier in the month, the government had launched a two-year fund for businesses affected by Covid-19. Dubbed the Economic Recovery Fund (ERF), it is to mobilize \$200 million and designed to support enterprises highly impacted by the crisis so they can survive, restart work and safeguard employment.

An initial \$100 million was allocated to the hotels sector loan refinancing as the cancellations of events and bookings due to the global lockdown and travel restrictions brought the sector to its knees, leading to a loss of over 90% of revenue.

Nsengiyumva Barakabuye, Chairman of the Rwanda Hospitality Association, commends the collaboration between the association and the government in responding to the crisis.

"We joined hands with the government in combating the pandemic through raising awareness to our members about Covid-19 and the measures to prevent its propagation," he says.

"We requested for a tax waiver and economic stimulus. So far, so good. Although not all we requested was granted, the PAYE (Pay as You Earn) was waived for four months and a post Covid-19 Recovery Fund was put in place by the government."

While the slow reopening of the tourism and hospitality sector has brought relief, Barakabuye says it's yet to pick up. "Tourism activities have just been reopened. Borders are still closed and we are yet to start as members are preparing for the domestic market."

New opportunities in a crisis

Twentyfive-year-old Nostalgie Patrice studied software engineering in China and the United States. When he graduated in 2018, he wasn't just nostalgic about his home country, he was also enthusiastic and prepared to use his newfound skills to seek opportunities in it. In March last year, he founded DTravela, a platform that aims to promote tourism and hospitality products digitally.

"I started DTravela after seeing how Rwanda was highly promoted as a tourism destination, and identified a business



Tourism activities have just been reopened. Borders are still closed and we are yet to start as members are preparing for the domestic market.

opportunity in unlocking its accessibility," says Patrice.

But now, sales has suffered. "Covid-19 has strongly affected us because our clients are not operating. From March to June, we had almost zero sales," he rues.

Going through this troublesome phase has been an uphill task. And like many others, he pivoted his business.

He revisited his idea of offering virtual tours, which had been disregarded by the many he had originally pitched it to. "When I took the proposal to different stakeholders prior to the pandemic, they could not understand its significance," he says.

This time around, it was welcomed and supported. He makes a strong case for virtual tourism, which he considers an unexplored route to attracting tourists.

"We do teasers and that helps raise awareness about a place or product. By showcasing products and profiling people, we are able to attract tourists because research has shown that 80% of them do online searches before visiting," says Patrice.

Last year, travel blog, *Travel Lemming*, voted Rwanda one of the top 30 emerging travel destinations worldwide for 2020 and the first in Africa. In addition to tourism partnerships with European topflight football clubs, 2020 was expected to be a good year for Rwanda's tourism sector.

Furthermore, the Global Peace Index 2020 ranked 'the land of a thousand hills' as the second most peaceful country in the East African region after Tanzania and 14th in Africa, from 17th last year. It was all the more

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Traveling isn't a basic need and now people are stretched, some have lost their jobs, or had their salaries cut. It's not easy to develop a package and convince them.

reason to believe 2020 would have been a landmark year for tourism in the country.

When Covid-19 was first identified in the country, the government suspended tourism and research activities in the three national parks namely Nyungwe, Gishwati-Mukura and the Volcanoes National Park, which are habitats of the renowned mountain gorillas and other primates.

Only Akagera National Park, home to 'The Big Five', remained temporarily open to visitors.

In the wake of the reopening of tourism, the Rwanda Development Board (RDB) has embarked on a promotional campaign for both Rwandan citizens and foreign visitors into these national attractions.

As Belise Kariza, Chief Tourism Officer at RDB, explains: "We're seeing good trends since tourism reopened.

"We have 69 bookings for Volcanoes National Park in a span of a week which is a very good indication. Out of them, 42 have confirmed bookings.

"In terms of international tourists, they usually plan between one month-and-plus ahead of time but the good news is that we've got a lot of inquiries about the functionality of testing and more queries and hopefully we're going to see international tourists arriving."

She points out that the government's strategy for tourism recovery will focus on domestic tourism while international tourism will be reopened in a phased manner.

Operators in the sector believe the pandemic should be an opportunity to strengthen indigenous tourism given the fact that international travel will take long to normalize. But Habimana of Wilson Tours and Travel





Rwandan celebrities taking a selfie at the renowned Nyungwe Canopy during a visit to the park

There are numerous community-based initiatives to promote domestic tourism



Agency observes that traveling isn't a passion for many Rwandese, especially now.

"Traveling isn't a basic need and now people are stretched, some have lost their jobs, or had their salaries cut. It's not easy to develop a package and convince them," he says.

He believes offering promotional prices alone won't be effective and recommends that the government also invests in behavior-change campaigns.

Rwanda's handling of the Covid-19 pandemic has been regarded by many as a success after the country made it to the list of 15 countries from where travelers are allowed into the European Union (EU) from July 1.

Besides Rwanda, only Morocco and Tunisia are included from the continent, as the EU member states consider these countries safe due to their epidemiological situation related to the coronavirus.

While most of the pandemic-induced hardships appear to be in the past, the tourism and hospitality sector is far from getting back on its feet.

In order for it to rebound, experts say that a number of steps must be followed to ensure a balance between reopening whilst ensuring people are safe from the virus.

Toyin Abiodun, the Strategic Advisor at the Tony Blair Institute for Global Change, tells FORBES AFRICA the steps include dialogues with industry players to draw out short-term tailored practical measures, ensure adequacy of a variety of infrastructure components for travel to and from tourist locations and continuously send out strong messages on the safety and security African destinations offer foreign travelers. He also believes regional coordination would significantly support



the sector's recovery. "Using regional marketing and promotion strategies, countries can co-create programs and opportunities to recover, develop joint messages of solidarity to draw interests from travelers with a diversified product, pricing and packaging offers."

Toyin adds that this would help reduce the adjustment costs associated with setting up individual protocol systems and ensure integration that enhances cross-country intel-sharing to restore traveler confidence.

Tour consultant Fridah advises that tour companies shouldn't lose hope but rather keep on promoting their packages and revise their prices so as to be afloat.

"In addition, in cases where a company feels overstaffed, they shouldn't fire their workers but rather come to an agreement to either pay them commission or halfsalary because firing them will not bring in business."

She explains that social media has been one of the ways she now promotes her business.

"I have been engaging with our audience on our social media handles, posting pictures for them not to lose hope [about] traveling again."

Surely, the operative word is hope, not just for tourism, but for every industry on the planet now fighting for survival.



COVER STORY

IN 1993, DR JAMES MWANGI WALKED AWAY FROM A PROMISING CAREER AT ONE OF KENYA'S LARGEST BANKS, TO JOIN THE EQUITY BUILDING SOCIETY. THREE DECADES ON, FEW COULD HAVE PREDICTED HIS ENTREPRENEURIAL LEADERSHIP WOULD WORK TO TRANSFORM NOT JUST EQUITY BUT THE FINANCIAL SERVICES OF THE REGION. FORBES AFRICA MEETS THE MAN BEHIND EAST AFRICA'S BILLION-DOLLAR BANKING EMPIRE.

BY MARIE SHABAYA

R JAMES
Mwangi,
Managing
Director
and CEO of
Kenya's Equity
Group, is a

captivating figure. His trademark smile and down-to-earth demeanour set him apart from the traditional banker. But Mwangi isn't your run-of-the-mill chief executive. His journey to the C-suite has been fuelled by sheer resolve, belligerent bravado, and an uncanny concern for his customers.

It's hard to believe that the force behind East Africa's pioneering billion-dollar banking brand grew up in circumstances far removed in rural Nyagatugu, a tiny village flanking the Aberdare mountains in central Kenya.

"I am a product of my upbringing [and] it has [had] a significant influence on how I see things today... [but] my village of Nyagatugu was not enough to say that I conquered Africa," declares Mwangi from his office at Equity's corporate headquarters in Upperhill, Nairobi's swanky business district, in an interview with FORBES AFRICA in July.

The banker describes his childhood as humble, dignified but fraught with difficulty. Born in 1962 to peasant farmers, Mwangi's parents had no formal education and lived apart from what he calls the 'monetary society'. As a boy, he had never met anyone

who owned a bank account or even fathomed being served by any of the country's banks which, at the time, only catered to a privileged few.

"It was a simple life. As boys, we grazed cows and goats... we hunted wild animals like rabbits. Growing up, we didn't know [if] people were 'well-off' or [if] people were 'poor', we were all equals. [As a community], we built houses together, tilled the land together, and even socialized together at village dances," he reminisces.

While it may seem contradictory, it was this deeply communal atmosphere that inspired the business that Mwangi built.

Founded in 1984, Equity did not start its commercial life as a bank but as a mutual society trading as the Equity Building Society (EBS). Back then, as Kenya was forging a new national identity, most banks were hesitant to provide its vast population with even the most basic financial services. As an answer, indigenous building societies took root. However, while buffeted by good intention, these fledgling financial institutions were poorly run, leading many to ruin.

In the 1970s, while these societies were emerging, life's challenges had already begun to shape the young Mwangi. Shortly after his birth, his family had suffered a major tragedy with the untimely death of his father. His mother, Grace Wairimu, was not only widowed but was left with seven children to raise on a meager income.

Never having gone to school herself, Mwangi's mother, who was an anchor throughout his life, was adamant that *all* her children, including her daughters, would study; a controversial decision at the time. And she was not prepared to compromise.

To achieve this dream, Wairimu imposed a strict code of discipline in her household whilst encouraging an entrepreneurial fervor in her children. The family sold milk, tea, charcoal, and fruits to stay afloat. It was an important training ground for the young Mwangi.

"We were vending to eke out a living, to pay school fees, and to feed the family. My instinct for commerce [came] from [there]... I realized that there is no wealth without work! Entrepreneurship means folding up your sleeves and working. Profit is the reward," he explains.

Nyagatugu was where Mwangi really cut his teeth in business. Then, owing to his academic talent, he had the opportunity to study the theory that governed his early entrepreneurial experiences, on scholarship, at the University of



"TAKING MILK TO THE VILLAGE RESTAURANT OR SELLING FRUITS TO THE VILLAGE MIDDLEMAN, WHO WOULD TAKE THEM TO (THE MARKET) IN NAIROBI, INTRODUCED ME TO THE CONCEPT OF 'SUPPLY CHAINS'. I REALIZED THAT I WAS THE 'PRIMARY PRODUCER' WITH MY MOTHER, THE 'MIDDLEMAN'DEALTWITH LOGISTICS, AND THEN AN 'AGGREGATOR', WHO WAS OUR FACE IN THE MARKETPLACE, PLAYED ON VOLUME AND MADE MORE MONEY THAN EVERYONE ELSE. THE OWNER OF THE SHOP RECEIVED (GOODS) FROM THE 'AGGREGATOR' AND SOLD THEM TO 'CONSUMERS', THROUGH THE 'BRAND' OF HIS SHOP. I (FINALLY) UNDERSTOOD HOW THE VALUE CREATED (IN THE SUPPLY CHAIN) WAS SHARED."

Nairobi several years later.

"Taking milk to the village restaurant or selling fruits to the village middleman, who would take them to [the market] in Nairobi, introduced me to the concept of 'supply chains'. I realized that I was the 'primary producer' with my mother, the 'middleman' dealt with logistics, and then an 'aggregator', who was our face in the marketplace, played on volume and made more money than everyone else. The owner of the shop received [goods] from the 'aggregator' and sold them to 'consumers', through the 'brand' of his shop. I [finally] understood how the value created [in the supply chain] was shared."

After university, Mwangi began his career as an auditor with Ernst & Young in Nairobi. Four years later, he moved to the now-defunct Trade Bank Group. Then an innovative financial services firm, founded in 1985, it quickly gained prominence as Kenya's first attempt at mass-market banking.

Over a brief career at the bank, he climbed the ranks from teller to Group Financial Controller.

However, just as things were looking up, a familiar face came calling. In 1993, the EBS was in trouble, with debt on its books. Founder and Chairman, Dr Peter Munga, had known Mwangi as a boy and was convinced that the young banker was his only hope. By then, Equity had been declared insolvent and was facing dissolution.

"We came from the same village where I had developed the reputation of a 'brilliant boy'. I was the first boy [from Nyagatugu] to get a university degree. I was also a youth leader in the church. In Nairobi, I had risen up to be a director at Trade Bank by the age of 28 [where] I had a reputation for being a sharp young man who was good at analytics and bold decision-making. All of that combined to package me, in the eyes of Dr Munga (and other EBS executives), as a credible, reliable person," he says.

Munga's confidence was not

misplaced. Eager to oblige, 31-year-old Mwangi left his job at Trade Bank to take on a role as Director of Strategy at the stagnating society.

"I had gone with [EBS executives] to Central Bank because they had been condemned with closure. Suddenly, the Governor looks at me, as I try to plead their case for more time, and he says [to me], 'if it was you who was talking of turnaround, then I would give you the opportunity'. I was between a rock and a hard place; if I hadn't made the sacrifice to join them, then they would [have had] to close," recalls Mwangi.

So, in a seemingly fool-hardy move, the young banker agreed to take on mounting debt, unpaid salaries, dwindling membership, and declining morale at Equity. He even remortgaged his own house to inject some desperately needed cash into the business, inextricably linking his fate, and hard-won reputation, with that of the beleaguered building society.

Given a carte blanche to transform the business and with no option of turning back, Mwangi was determined to meet his mandate.

"I had made the decision from an emotional aspect [and] I didn't want to fail them. But I hadn't realized that Equity was in [such] a bad state. It had not done any [debt] reconciliation, it had not published accounts for three years, and it had not had a board meeting for [over] two years. With everything at stake, it was only my entrepreneurial skill that would [eventually] get us out of insolvency."

Mwangi's reforms were more an attempt at reinvention rather than resuscitation. He began by re-training the organization's remaining staff in the ethos that would later come to define them – customer care.

"We didn't have money... the currency that created Equity was a passion to please the customer. I had a very small staff, none of whom had gone beyond Form 4 [Grade 10]. They didn't

JAMES MWANGI'S 10 TIPS FOR ENTREPRENEURS DURING COVID-19

- **1.** Stick and focus on purpose, use essence to filter dos and don'ts.
- **2.** Protect the public license. Society will never forget the side or position you took when you had the chance.
- **3.** Support the supply and value chain and recover. Bend backwards to accommodate your business' unusual circumstances.
- **4.** Adopt a shared prosperity model using social and impact investing.
- **5.** Adapt to 'the new normal'. Be aware Covid-19 might have irreversibly changed your world in terms of resource reallocation, priorities, tastes and preferences.
- **6.** Be part of the solution to our shared global challenges in humanity, health, and livelihoods. Don't run away from the reality your customers are facing.
- **7.** Focus on the opportunities of the fourth industrial revolution like digitization, big data, technology and innovation.
- **8.** Adopt an appropriate leadership style for these uncertain times. Provide visibility, hope and answers to concerns and when carrying your followers along with you.
- **9.** Preserve cash, liquidity, and capital reserves for the long haul.
- **10.** It is all about people: staff, customers, society and humanity.

According to a Lagos Business School case study, Mwangi ensured that, in this way, his 12,000 customers were accorded with the dignity they deserved, breathing new life into the institution. This had an impact on both sides of the counter. Customers felt valued and continued to patronize the building society. On their side, staff felt confident and empowered even whilst working long hours.

In 1997, things looked promising. Equity had cleared its debts, encouraging staff and customers to begin purchasing shares in the company. This time around, Mwangi made sure that records were meticulously kept.

According to its website, Equity's client accounts had grown exponentially from 32,000, in 1997, to 482,000 by 2005. This exemplary track record allowed Mwangi to raise capital from the European Union (EU), the International Finance Corporation (IFC), and other institutional lenders to introduce computing technology to the building society, paving way for his ambitious expansion plans.

"Transaction times dropped from 30 minutes to five, queues disappeared, the process, including signatures and so on, was automated. Equity was now on a rapid, but solid, growth path," notes Mwangi in a 2012 interview to *African Business*.

Steady growth made the building society's transition to Equity Bank, in August 2004, possible. Two years later, the bank listed on the Nairobi Securities Exchange (NSE). Bolstered by further investment, Equity made its first foray into the region, listing on the Uganda Securities Exchange, as EBL in 2009.

Within five years, the bank was operating subsidiaries in Rwanda, Tanzania, and was among the first to open branches in South Sudan, Africa's youngest country. By 2019, the bank had transformed, yet again, becoming Equity Group Holdings, with customers across East Africa.

In 2020, three decades after Mwangi made his debut, the Equity Group boasted a market capitalization of KES128.1 billion (approx. \$1.3 billion) making it the largest banking outfit in East Africa, out-rivalling its closest competitors.

Equity's tremendous transformation is due, in large part, to what is now known as 'The Mwangi Model'. Thanks to this ground-breaking framework, Mwangi has been able to introduce a bulk of East Africa's low-income population to the financial services sector. It is a model of inclusion that thrives on high volumes, low margins, and mass-market appeal.

"I realized [after leaving Trade Bank] that it was not the bank of the common man. My mother would have never been able to [open] an account there. Nobody in my village would have qualified for an account either. In fact, not even [EBS Founder] Dr Peter Munga would have





"COVID-19 HAS BEEN A TURNING POINT. WE HAVE ANALYSED OVER 1,200 YEARS OF DATA, STARTING WITH THE BUBONIC PLAGUE, TO UNDERSTAND THIS (COVID-19) PANDEMIC. THE ONLY WAY WE CAN SURVIVE THIS IS IF (OUR) BUSINESS IS AGILE AND RESILIENT ENOUGH TO NAVIGATE THESE TIMES."

qualified. I had a singular mind to build a bank for my mother who [I saw] bury savings under her mattress," reveals Mwangi.

At the time, this drive to serve the so-called 'unbankable' population had only been attempted once before at the Grameen Bank founded in 1984 by Nobel Laureate Muhammad Yunus in Bangladesh. However, in Kenya, the model was risky, untested, and needed modifying.

"To be honest, [in 1993] I didn't have a very good view of what Muhammad Yunus was doing. His [main product] was group lending, Equity started out with individual lending. I simply wanted to remove the barriers for people, like my mother, in opening bank accounts. We could do better than a mattress!"

This revolutionary perspective blew open the Kenyan banking sector. By eliminating monthly ledger fees, minimum balance requirements, and easing withdrawal limits, Equity ended up engineering a product that it could bank on.

By 2000, Mwangi says, Equity began signing on an average of 100 new clients per day. Going directly to its customers, initially, in weekly marketing campaigns in rural towns and villages, the bank eventually developed a network of third-party 'banking agents' to provide services across Kenya, even in the most far-flung corners.

Today, with mobile banking, Equity's customers benefit from yet more convenience with access anywhere, any time, and at a minimal cost.

As a result, Mwangi's entrepreneurial reward has extended far beyond profit. The 'Mwangi Model' has been recognized and analysed in case studies at some of the world's most prestigious business schools including Stanford, Columbia, Harvard, and the Lagos Business School.

He is also the holder of numerous honorary

degrees and the winner of countless awards for his commercial prowess. The first, and most memorable, he says, was the 'Global Vision Award', which Mwangi won alongside fellow micro-finance trailblazer, Muhammad Yunus, at the 2007 G8 Summit.

In 2012, after clinching the title of FORBES AFRICA 'Person of the Year', the Kenyan banker triumphed over 58 global business leaders to become the

first African ever to be crowned Ernst & Young's 'World Entrepreneur of the Year' in Monaco.

Mwangi, as Founding Chairman of the Equity Group Foundation (EGF), is also a prolific philanthropist. In May this year, EGF, with the Mastercard Foundation, pledged KES1.1 billion (\$10.3 million), to Kenya's Covid-19 response and to provide personal protective equipment to frontline medical staff in public hospitals. A portion of the endowment, KES300 million (\$2.8 million), was a personal donation from the Mwangi family. Since March, the banker has been a member of the Covid-19 Emergency Fund Committee, a 10-member board peopled by the country's most accomplished private sector leaders, convened by President Uhuru Kenyatta.

A key feature of the 'Mwangi Model' is its resilience which the current pandemic is putting to the test. In June, Equity saw its acquisition plans, through the highly-anticipated Altas Mara deal, in Rwanda, Tanzania, Mozambique, and Zambia, halted. Instead, Mwangi announced that the Group was doubling down and would take a more conservative approach to see through the crisis. In an unprecedented move, shareholder dividend payments were also delayed to safeguard liquidity reserves.

"Covid-19 has been a turning point. We have analysed over 1,200 years of data, starting with the bubonic plague, to understand this [Covid-19] pandemic. The only way we can survive this is if [our] business is agile and resilient enough to navigate these times."

While much is still uncertain, the pandemic has had some positives for Mwangi, a proud husband and family man.

"I am not a very outgoing character so 'working from home' has been very exciting for me. I've been able to spend more time with my family, which is important for me," he says.

On another high note, Mwangi jests that Covid-19's most visible impact has not been on his balance sheet but his waistline.

"I have been making the best of this crisis. Instead of 30 minutes, I am now able to put in at least two and a half hours at the gym. When I look at myself [in the mirror], my body is looking much better!"

Despite the present tumult, Mwangi insists that the fundamentals remain unchanged and only the things that matter get him up, at 3AM, to start his day.

"Seeing a smile in people's lives still makes me happy. I've lived a full life and it's humbling to know that the child my mother raised has not changed and [with the values she taught me] I'm able to share what I have with others. Thirty years later, it's been a journey of changing one life at a time."

Covid-19: Africa's Gender Pandemic

From New Zealand's Prime Minister, Jacinda Ardern, to German Chancellor, Angela Merkel, Covid-19 has been shining a light on women and paving the way for new thinking in global leadership. But, in Africa, has it been so? A look through the gender lens of the pandemic.

BY MARIE SHABAYA

N MARCH, SHORTLY AFTER
Liberia confirmed its first case of Covid-19,
Cornelia Kruah-Togba got to work. The
30-year-old women's rights advocate was
alarmed by the devastation the Ebola outbreak
wreaked in her hometown, Monrovia, back in
2014. This time around, she was determined not
to leave anything to chance.

"During Ebola, [public] doubt led to a lot of people dying so we had to make sure that our people were getting involved in this fight early on. We set up a coronavirus 'taskforce', identifying major intersections where most people gathered and set up hand-washing stations, in addition to executing a counterconspiracy campaign. There has been a lot to do to help people realize that this is a genuine threat and that they should act accordingly."

Kruah-Togba's fast action and considered strategy have had an impact. New cases in the Liberian capital have been on a





downward trend since July. Her initiative, even at community-level, is no different from those celebrated in Taiwan, Germany and South Korea. In each of these countries, women leaders have been credited with containing and even, in the case of Jacinda Ardern's Premiership in New Zealand, completely eradicating Covid-19.

While we have to be careful not to generalize that these outcomes have purely been a result of having women at the helm, they remain legacies of their leadership.

In stark contrast, similar examples have been slow to emerge in Africa. Many, like Kruah-Togba, are working in localized contexts, far from the glare of mainstream media.

But what about women in public view? Why are they missing in our stories of the pandemic?

Women are on a number of the continent's policy-making tables, says Madjiguene Sock, Partner at Dalberg Advisors, a global consultancy firm in Dakar, Senegal. Working in an advisory capacity with a number of public health organizations around the continent, she has observed that, while women may be in positions of power, they are often forced to take a back-seat during crises like Covid-19.

"The face of the emergency response institutions in the countries [that I've worked in] have been 100% male. However, women continue to be very present, for example, in the Ministry of Health... but in terms of the response, where it's more military-like, men tend to be in [leadership] positions.

"We have a lot of work to do [in order] to make leadership and decision-making in the 'war room' more gendered," she notes.

Indeed, it is quite paradoxical that



During Ebola, [public] doubt led to a lot of people dying so we had to make sure that our people were getting involved in this fight early on.

- Cornelia Kruah-Togba

African women have a concerted role in peacetime yet are sidelined in emergencies. However, the recent Ebola crisis has inspired action.

"We started paying attention to gender because of Ebola. The Minister of Health in Senegal, at the time, was a woman and so were many others in the region. But [back then], gender was not the question. [With Covid-19], we have been thinking about setting up EOCs [Emergency Operation Centers] with gender in mind. Something interesting is that the decisions being made in terms of setting up these EOCs have been made by women. But once we set up these platforms, we revert back to masculine leadership," says Sock.

Gendered responses to the pandemic, and similar crises, are far greater than representation. They also impact outcomes.

In April, United Nations (UN) Secretary-General, António Guterres, urged the world's governments and policy-makers to prioritize women and girls in Covid-19 policies. This is because they represent a majority of the pandemic's victims, not in terms of mortality, but economically and socially, simply by virtue of their gender.

A month after Guterres' injunction, female politicians from seven African countries gathered in an African Union teleconference to discuss ways to enhance their leadership in the Covid-19 response.

The meeting was chaired by Naledi Pandor, South Africa's Minister of International Relations and Cooperation, and Kenya's Raychelle Awuor Omamo, Cabinet Secretary for Foreign Affairs, supported by UN Deputy Secretary-General, Amina J Mohammed from Nigeria.

They all agreed that, given the adverse impact on women, the deficits in gendered leadership, and the rise of women on the frontlines of the pandemic, a profound paradigm shift on the continent was needed. The meeting underscored the fact that business cannot, and should not, continue as usual.

However, commitment alone is not enough. The conditions that make inclusion possible are quite complex. Based in Nairobi, Cameroonian public health practitioner, Lolem Ngong, is Chief of Staff at Amref Health Africa, an NGO committed to improving healthcare systems across the continent. In her view, leadership within the sector varies widely, especially through the gender lens.

"I think women in public health crave to see other women around the table, they want to make sure that the voice of frontline workers [who are mostly women] are represented and that they're working to create a better life for the communities that they serve. This spirit drives leadership [in the sector]. It's not to say that men [in public health] don't do this but I think the experience of men is quite different. They have either been in authoritative positions or seen other men in similar positions and this



I think women in public health crave to see other women around the table, they want to make sure that the voice of frontline workers [who are mostly women] are represented and that they're working to create a better life for the communities that they serve. This spirit drives leadership [in the sector].

- Lolem Ngong

drives a certain style of leadership," posits Ngong.

However, even within public health, there isn't a prescriptive feminine, 'one-size-fits-all' kind of leadership.

For Ngong, her own role during this pandemic has been difficult to pin down.

"I've been acting almost like a glue that brings everything together attempting to streamline processes, strategy, and so on. My role is really one of strategic partnership, advising on issues, sometimes from 6AM to 11PM... that's leadership, it's a sacrifice! As a leader, in this pandemic, I have found that I've really had to draw on a lot of my skills and introspect," she says.

Beyond differing approaches, there is also a major blind-spot in gender responses to Covid-19, and similar crises, in Africa.

"We can throw out numbers when talking about [female] representation [in Africa] across the board. But the truth is, within public health, we just don't have the data. This points to why our policies are so gender-blind. What do you use to inform policy? You need data!"

The lack of gender-specific data points to why even growing female representation, even at the higher level, is still having lacklustre results for women on the ground, particularly during this pandemic.

Nevertheless, there have been coordinated efforts from women, in other sectors of society, to safeguard those affected by these policies.

Amina Abdulla is Country Director at Concern Worldwide, a global NGO operating in Kenya. Since the start of the pandemic, she's noticed that progress made on women's rights issues, such as eradicating child marriage and female genital mutilation (FGM), has been eroding.

"Covid-19 has undone almost a year's worth of work. In parts of northern Kenya, families are taking advantage of the prolonged period that kids have been at home to perform FGM in the cover of darkness. [With curfew], there is limited activity from 7PM onwards [so] that is when they [choose to] perform this on their girls," she says.

Culturally, within these communities, once a girl undergoes this form of mutilation, she is considered ready for marriage.

Therefore, increasing incidents of FGM heavily correlates to reciprocal trends in child marriage. Once a girl is married off, she often loses her right to education. Given the economic uncertainty set off by the pandemic, this has been seen as a means to an end for many households.

"Families would be looking for a suitor for these girls because it's one less mouth to feed and it's also a way for income or assets to come to the [home]. But this also means there's one girl less in school, one more



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 Amina Abdulla, Country Director, Concern Worldwide

child mother, and all the risks that come with it. The cycle of poverty continues with this single act."

Other gender issues that have been prevalent during the pandemic have to do with domestic violence, job loss, forced sex work as well as declining access to maternal health facilities which has led to more fatalities.

To support women and girls, Abdulla's organization has partnered with the European Union (EU) to provide vulnerable households, in informal settlements across Kenya, with cash transfers for several months so they can build resilience against Covid-19, along with a host of other interventions.

"We opted for cash because it gives [them] choices. It allows them the agency to make decisions on how to spend that money and provide for themselves within their preferences. We're [also] working with the Ministry of Health to help build back confidence in the community that it's safe for mothers and children to seek medical services," she explains.

Back in Liberia, which has had a recent legacy of strong female leadership, young women like Kruah-Togba, have also stepped in to support those affected by prevailing Covid-19



policy mandates.

Suma Massaley and Benita Urey are two of them.

For 24-year-old Massaley, supporting the elderly was critical. With a bulk of Monrovia's population living below the poverty line and a considerable majority dependent on the informal sector for an income, the elderly became a high-risk group not only in their susceptibility to Covid-19 but also due to the fact that they had no welfare state to rely on. Through social media, she managed to raise \$12,885 to support them.

"I was concerned for elderly folks who are dependent on their children, [many of whom] lost their jobs because of the lockdown or whose businesses had to come to a halt. When we raised our first \$2,000, I posted on social media asking Liberians to recommend communities that needed the most help. We are giving each household a bag of rice, a gallon of oil [and] a package of toiletries," she says.

She says that mentorship from Liberian women in public service including Nobel Laureate and peace activist, Leymah Gbowee, who is credited for having a hand in ending the Civil War in 2003, was pivotal in her project.

"If I didn't have strong women to look up to, I wouldn't have dared to take on such a

challenge. When I first thought of the idea, I called Leymah and told her [about it]. She was really supportive and mentored me through it all."

Urey also took on an unexpected role in community leadership with her project 'Package for Hope', distributing food parcels to the country's rural communities.

"Many Liberians live on the money they've made during the day, so [when] the State of Emergency was put in place, a majority of them found it extremely hard to make the income they were used to," she explains.

Through online fundraisers, Urey was able to raise \$1,000 and 20 bags of rice within an hour. Eventually, she managed to collect over \$3,500 in donations. Living in Monrovia, she felt that the funds would be better served in remote communities, far from the capital. Urey, too, has been inspired by the women she has seen in political leadership and is now paying it forward.

"Although we had a female President for 12 years in Liberia, women joining politics is still something many Liberians don't want to see. However, women continue to make a huge impact... I always like to take the path that

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Although we had a female President for 12 years in Liberia, women joining politics is still something many Liberians don't want to see. However, women continue to make a huge impact... I always like to take the path that best fits me and [this has led to other] promising young Liberian girls reaching out to me [asking me] to teach them.

Benita Urey

best fits me and [this has led to other] promising young Liberian girls reaching out to me [asking me] to teach them," she says.

From their example, we can conclude that, at least in Liberia, women have been at the forefront of national Covid-19 response albeit unofficially. However what about the women who are looking to make an impact in future crises?

Oyindamola Adefisayo, from Nigeria, is a PhD candidate at the Weill Cornell Graduate School of Medical Sciences in New York City.

She's seen the worst of the Covid-19 pandemic in the American metropolis and has studied the country's responses to it, but she has also had her eye on movements back home where she hopes to return after her studies.

However, she is realistic about her options.

"Outside of the few women who have been able to break through ranks and serve politically, I honestly do not see a clear career path for leadership roles in policy outside of taking the NGO route. While there are some astounding women working to make changes in science and public health in Africa, there are simply not enough who are visible to [those of] us who want to follow this career path," she admits.

Taking the broader view, Sock, in Senegal, argues that while African women in leadership may not be visible, they are effective.

"Policy takes time and I find women are more patient. When the Ebola crisis was no longer an emergency, I



It could be due to Covid-19 that public health is [becoming] really popular. I think we'll definitely be seeing shifts in the next five years because of this.

saw more women stick with it, [even though] it was no longer in front of the cameras. Already with Covid-19, women [leaders] are engaging with scenarios post-crisis on how to continue strengthening emergency response systems, for example. Women have the ability to think more broadly for their communities. We need to see more of this not only in emergency responses but also in public health leadership," she insists.

However, in Kenya, Ngong is more positive in her assessment.

"I really think the outlook is bright for women in leadership. I've had young women between the ages of 19 to 21 [recently] contact me on becoming their mentor. That, to me, is really



inspiring. It could be due to Covid-19 that public health is [becoming] really popular. I think we'll definitely be seeing shifts in the next five years because of this," she predicts.

Nonetheless, Adefisayo feels more can be done for the young women looking to join and, hopefully, lead the sector.

"I am inspired by the number of women [that] I see making a great effort in changing the narrative around public health and science policy. However, this effort often seems stifled, more by the lack of interest and commitment to making the necessary changes by government.

"Creating visibility for women involved by building networks could be a feasible way of inspiring the next generation and teaching [them] the lessons [already] learned," she argues.

While Covid-19 has reignited a silent debate on the role of African women in public health policy, its greatest lessons may lie in what is missing, insists Ngong.

"We have to have data systems! As we start talking about vaccine trials and preparedness for access, my biggest worry is what data we're going to use in African countries. In terms of gender, we'll need data to understand which groups we're going to prioritize."

As the debate blares on, the conclusion to be made is that women are the beating, but unsung, heart of the continent's public health systems.

Ensuring that they are not only acknowledged but that their voices are heard during this pandemic, and in those to come, is a kindness long overdue.

APP YOU LIKE IT

The newly-established delivery app industry in Tanzania is serving up old business in a new format, diversifying the e-commerce market and driving consumer behavior beyond Covid-19.

BY INAARA GANGJI

the home delivery application, Piki Tanzania, he only thought of it as a supplement to restaurant dining. However, when Tanzania also fell victim to the Covid-19 crisis in March, Piki, which was still new and the only established app of its kind in the country, soon became the only way some restaurants were doling out their services.

"I think a lot of people took that decision to stay at home and avoid contact. So, we suddenly realized how important we were becoming," says Prescott, also former CEO of Junia Tanzania.

At the end of November 2019, Jumia, Africa's leading online retailer known as the 'Amazon of Africa', had shut its e-commerce operations in Tanzania in a review of its portfolio.

However, ironically, since the beginning of 2020, in the very market that Jumia exited, multiple e-commerce platforms suddenly sprung up, from food and grocery delivery apps to 'online malls' that sell commercial goods, besieging a market still relatively new to online shopping and dining.

With Covid-19, the role these platforms played in the lives of local businesses changed almost overnight.

For Levant, a fine dining restaurant offering Middle Eastern cuisine in upscale Dar es Salaam, delivery was not the path they wanted to take, but *had* to.

"When Covid-19 hit, our sales were 90% lower. Our plan was to give an experience, it's not only the food you eat... [but] we realized people were afraid, so we had to focus on delivery... take-away was most of our sales," says Hussein T Hamadi, the owner of Levant, which started delivering through Piki when the pandemic hit and even started its own delivery service.

Although this is the path Levant opted, Hamadi does not see

delivery and e-commerce playing a significant role in his business with restaurants now reopening in full swing in the country.

Piki surely has an advantage in the country with its reliable infrastructure and experience, but the commissions are not reasonable in Hamadi's opinion, since his own delivery service costs him much less.

He would rather people came into his restaurant because this is part of the service he wants to offer.

In addition to that, Hamadi is opening yet another restaurant, with a more deliveryfriendly menu and where he hopes e-commerce may be more feasible.

On the other hand, Central Park Café, an American-style café and children's park and venue that also works with Piki, does not see any way in which businesses, going forward, can avoid



e-commerce.

"During these times, people rely on [Piki]... it's basically a lot of the weight lifted off us for the pressure because it is a very tough market and things are very unpredictable here," says Sidiqua Versi, co-owner of the café.

The fact that the liability for deliveries is also no longer her problem is an advantage, she adds.

Versi agrees the delivery and commission fees are not reasonable for all, and individual delivery is far more financially sustainable, but an app like Piki is reliable and she would rather keep working with them to use their customer base and keep her service timely and efficient.

However, she has noticed customers opting for cheaper options and more players foraying into the market with unique business models.

New players, renewed approaches

Duka.direct is an online grocery delivery service that runs on a platform created by Selcom Tanzania, a digital payment system developer that also saw a very quick change in consumer behavior when Covid-19 gripped the country.

"The adoption was a lot faster than we had anticipated and we even had to accelerate deployment quite rapidly," says Sameer Hirji, Executive Director of

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We're thinking like a financial services business, but using consumer goods and services...

– Sameer Hirji, Executive
Director, Selcom

Selcom. It is planning to expand to a range of services to include restaurant food delivery, as well as connecting to businesses selling electronics, pharmaceuticals and other items, eventually throughout the region. However, its approach is not only controlling the supply of products, but in the long run, seeing itself as more than just being a customer experience and service provider.

"We're thinking like a financial services business, but using consumer goods and services... We want to hopefully one day make e-commerce extremely mainstream and as a result, for the common man, who previously couldn't afford maybe cheese, because it was marked up at like 30% at a supermarket, to be able to access those premium products and consume them more readily and rapidly," he says.

He hopes to eventually pilot using Selcom's widely-used payment agents to act as sales and pickup points, as well as introduce lending on the apps





to allow customers to buy goods by borrowing from banks Selcom has relationships with.

"At least initially, [duka.direct] can be a standalone business [not making much profit]. But it needs to be part of something bigger that can feed it, and then continuously grow it...

"I think raising awareness and giving back value is where we see the market going," he adds.

The biggest problem Hirji's platform did face during the time was running out of space and local suppliers who were not able to keep up with the demand.

"That right image in the market matters in terms of what the delivery, the last mile, looks like... [and] to a great extent the optics it presents in the market in terms of brand and professionalism," says Hirji.

However, there are players in the market like Inalipa, a platform that mimics an 'online mall' with a variety of local shops and brands, ranging from Instagram businesses to large retailers, that has internalized all operations.

"I'm sure our competitors, because of our model, have much higher volumes than us. But the experience that the customer gets with us is something that stands out... We're able to control the entire customer experience. And I think for us, that's the big differentiator," says Nadeem Juma, chairman of AIM group, which developed and runs Inalipa.

Inalipa also takes a slightly different approach by aggregating retail suppliers and leveraging their brands. While Juma says it was initially not easy to bring them on, Covid-19 forced Inalipa to be able to tell them a story of how this would impact their business positively.

"Trading is actually what the bulk of Tanzanian business is built on... it's really old business in a new format. And that's the way we look at it... We aren't trying to change the culture or the way a consumer purchases

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When Covid-19 hit, our sales were 90% lower. Our plan was to give an experience, it's not only the food you eat... [but] we realized people were afraid, so we had to focus on delivery...

- Hussein T Hamadi, owner, Levant

traditionally; we are enabling that same experience on a digital platform," he adds.

But even with trying to maximize customer satisfaction, Juma found that the number one question among customers who went through the process of putting items in their cart was that they weren't sure if they could trust the platform.

"Right now, we're realizing that people are the early adopters, starting off with very small basket sizes and now those basket sizes are growing."

Duka.direct provides store credit and uses marketing to build credibility and confidence and Inalipa uses customer service calls to encourage people to go through with purchases.

"What [Covid-19] showed us is there's enough space in the market for different players as long as they're very focused on what they're trying to achieve and not trying to do a little bit of everything," says Juma.

The direct contact and understanding of the local market is a large advantage to players in the market, according to Prescott, and is what differentiates them.

Looking into the future

Both Hirji and Juma acknowledge that the global valuation-driven approach to e-commerce, which was Jumia's too, is not necessarily the approach that can work in Tanzania.

"I don't believe that that is the appropriate way to go about e-commerce because you really cannot raise money at that scale continuously to be sustainable. You have to make it a profitable business... You need to identify what are the levers, one of the things that you want to drive, and then map that out over a period of time" says Juma.

Being in the digital space does allow you to pivot faster, according to Hirji.

And this can be especially useful in navigating the regulatory landscape in Tanzania because of the penetration of mobile money, in Juma's opinion.

"It's a highly regulated space. So you need to be

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Right now, we're realizing that people are the early adopters, starting off with very small basket sizes and now those basket sizes are growing.

- Nadeem Juma of Inalipa

aware of what you can and can't do. And sometimes that can be what could slow you down... But I think it also allows you to contribute to the actual country's growth as well."

However, Tanzania is still a difficult market, with about 60% market share in terms of smartphones in the country and utilization under 20%, and if the penetration is further discounted by the number of people who will actually swap their traditional practices for an e-commerce experience, then that drops even more, says Hirji.

Such data is available, but not in much detail about

e-commerce, mostly because of how the market has diversified only recently in the country.

Juma believes there is a greater good if everyone is a bit more open and transparent in sharing their experience of this business, as Inalipa's data collection has shown customer sets that he didn't know existed.

While Prescott acknowledges Jumia did educate the Tanzanian market on the e-commerce experience, there is a long way to go in terms of how consumer behavior will change or adapt in the country to prove sustainable beyond e-commerce being a critical service in the time of Covid-19.

"It's certainly beyond just your traditional corner store saying, 'I want to go digital because everyone else is going online'. I think there's a roadmap that's a lot more sophisticated than just a Shopify storefront," says Hirji.

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'THE DIGITAL ECONOMY IS AN EXTREMELY POWERFUL, TRANSPARENT TOOL'

WHAT ARE THE BIG CORPORATES THINKING? RAGHU MALHOTRA, THE DUBAI-BASED PRESIDENT OF MASTERCARD MIDDLE EAST & AFRICA, ON DEVELOPING CLEAR FRAMEWORKS FOR THE CURRENT CRISIS, AND WHY DIGITAL TRANSFORMATION IS MORE IMPORTANT NOW THAN EVER BEFORE.

ddressing the challenges of Covid-19
We absolutely find ourselves in a place where we are mandated to think differently about how we interact with the world around us. And it's not just the challenge, but the scale of it that's so astounding.
Organizations need to play a vital role in enabling commerce

critical to sustain people's health and wellbeing.

Technology has always played an important role in how Mastercard addresses challenges, and that is even more true today. Through technology, we are better able to support all the partners with whom we interact in this ecosystem – governments, public sector, private companies, small businesses, fintechs, mobile network operators, retailers, merchants and consumers.

We developed a clear framework to address the impact of Covid-19 – containment, stabilization, normalization and long-term plans for eventual growth. We have been accelerating and enhancing our innovative services and solutions that can help businesses and governments in the region and around the world to assess, react and plan through the current crisis. We are now seeing signs that global economies are starting gradually to move into the stabilization phase.

Of course, first and foremost among the many challenges has been the cost to human health and wellbeing. We have committed to no job losses as a result of Covid-19. As an inclusive company, we know it's paramount to consider diverse perspectives. We are encouraging learning, development and volunteering as our people combat challenges, but also discover new strengths.

Contactless payments and changing consumer behavior

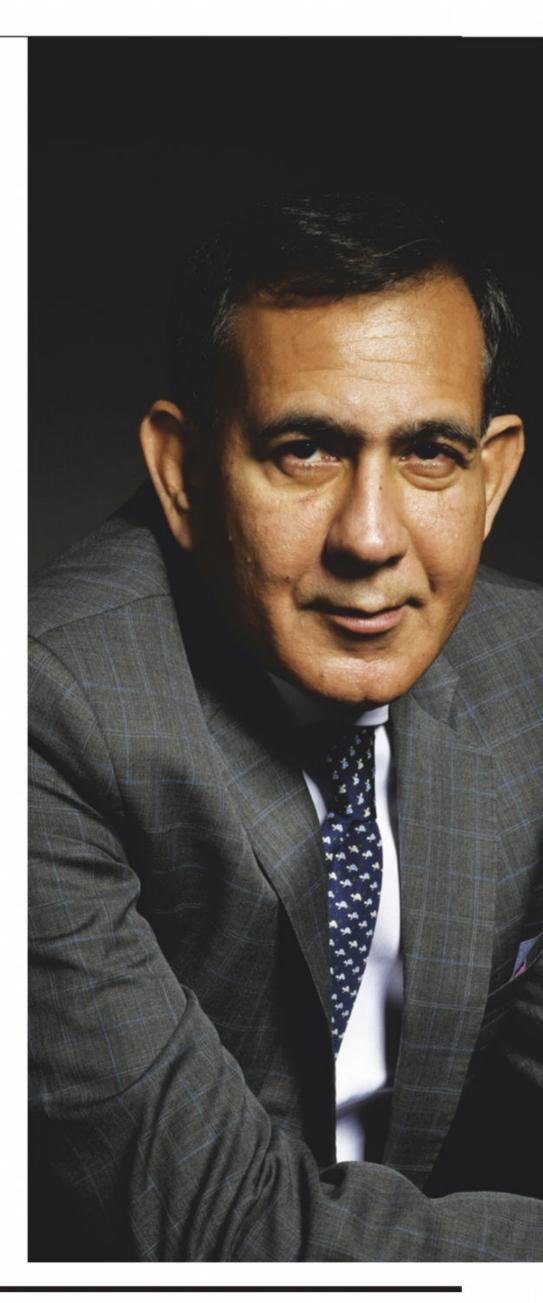
Consumer behavior changes as people adapt to new environments. In order to observe social distancing, people are opting for digital and contactless modes of payment that are safe, secure and fast. While countries and sectors worldwide are at different stages of contactless deployment and usage for daily shopping habits, Mastercard saw the number of contactless transactions in South Africa grew 13X in March 2020 compared to March 2019 in grocery and pharmacy categories.

Contactless is definitely here to stay. In our consumer sentiment study from April this year, 78% of respondents in South Africa said they will continue to use contactless post-pandemic. The study revealed that since the beginning of Covid-19 in South Africa, 89% of South African respondents have been using contactless to pay for groceries, 60% for pharmaceutical items, 39% for other retail items, 15% for fast food, and 8% for transport.

When we look at the trends and data of growth in digital payments and online shopping, it's significant. According to Mastercard data, for every \$100 spent in Middle East and Africa (MEA), half was spent on e-commerce in May compared to a third of this figure in February this year.

Prioritizing inclusion

For everyone to benefit, we must include everyone – that's why financial inclusion is so important. The



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In Africa, online sales currently represent only 1% of total retail sales, so there are opportunities for Africa's small businesses as they go digital.

digital economy is going to keep growing, and to ensure we advance real, genuine, inclusive growth, we need to make access easier and simpler. Bridging the digital divide is essential to enabling financial inclusion. Cash remains a drawback to financial inclusion and growth, which is why it's so important for all partners to work together to build communities that are less reliant on cash and better positioned to take advantage of digital growth.

Our goal is to reach 1 billion people by 2025, including millions of small businesses and women entrepreneurs. Over the past five years, Mastercard has already reached 500 million people in 80 countries through 350 collaborative programs, including Kasha, an e-commerce platform in East Africa optimized for women's health and personal care.

It offers confidential and convenient service, online and offline digital ordering and delivery to both urban and low-income rural areas. The digital marketplace for farmers via the Mastercard Farmers Network (MFN) and a digitized school payment ecosystem through the Kupaa initiative are other examples.

Mobile network operators play an enormous part in financial inclusion as we have a long-lasting partnership with these telcos, as well as fintechs and e-tailers, to reach people – especially those who don't have bank accounts, as these are the people who will benefit from a digital wallet to transact with mobile money through QR codes and Virtual Card Numbers. Mobile money has transformed the landscape and almost half (45%) of all mobile money activity happens in sub-Saharan Africa. Technology is helping us achieve things previous generations could only dream of.

Helping SMEs reinvent themselves

Nine in 10 businesses in sub-Saharan Africa fall into the SME category, so they are incredibly important in driving growth for African economies and providing livelihoods for millions of people. Their success means sustainable prosperity for Africa's entrepreneurs and going digital is a crucial part of this process. In Africa, online sales currently represent only 1% of total retail sales, so there are opportunities for Africa's small businesses as they go digital.

One of the many initiatives we are supporting includes helping small businesses in Nigeria to set up digital money accounts and accept QR payments using Facebook Messenger and a Masterpass QR bot. In addition, we partnered with Letshego in Mozambique to pilot Community Commerce in order to digitize low-value transactions for shopkeepers of informal convenience shops. In South Africa, Mastercard has partnered with fintechs like uKheshe and iKhokha and other financial services providers, to offer low-cost digital payment solutions to SMMEs and the unbanked to fast track financial inclusion.

Over the next five years, Mastercard has pledged \$250 million in financial, technology, product, and insights support to small businesses across the globe. These include measures such as helping small businesses with cash flow to sustain operations, providing access to credit, making insights available for decision-making and securing solutions to go digital, or grow in digital.

Shaping the digital economy

At its core, the digital economy is an extremely powerful, transparent tool that enables social welfare grants for pensioners, working capital to SMEs, secure revenue streams, more convenience and lower costs for citizens. Our multirail approach is at the heart of how Mastercard is positively transforming the future of the digital economy. Through product introductions and acquisitions, we are reinforcing our value propositions in terms of government, account-to-account, and business-to-business payments. Additionally, we have rolled out technology for real-time transfers in bill payments and payouts, and prioritized security technology to help guard against increased fraud risk. We are participating in as many payment flows as we can to stay ahead of the changing landscape, delivering essential choices to banks, businesses and consumers.

Africa remains a top priority for Mastercard and we strive to help create a more connected continent that can continue its digital transformation and reach its full potential. We have been committed to progress in Africa for over 45 years, we are able to stay connected to Africa's unique challenges and tremendous opportunities, as well as its inherent possibilities to succeed. •

– Interviewed by Renuka Methil



GUT INSTINCT

Gut intelligence is the next step in personalized medicine that could help prevent certain illnesses.

BY TIANA CLINE

verything about the human body in terms of how we function, how we age, what chronic diseases we get, what chronic diseases we don't get, all relate back to the composition and activity of the microbiome. There's no other single thing in our universe that has that profound [an] effect on everything about our lives," says Dr Stephen Barrie. The vice president of Viome, the gut intelligence home testing company, he has been researching the human microbiome for the past 30 years.

Understanding the microbiome – the entire collection of microbes living inside and on the body – is the next step in personalized medicine and it's far more than 'you are what you eat' (although analysing your gut will tell you that too). Gut health has a complex and profound effect on human physiology, impacting aspects like brain health, hypertension, diabetes, obesity and autoimmune disease.

"Our human gut contains a large number of microorganisms that perform a variety of metabolic functions in our gut. Scientists are realizing that the metabolites produced by these microorganisms have a profound effect on our physiology – in other words, how the body works – and this has direct links to disease and health," explains Dr Yvonne Holt, Next Bioscience's chief medical officer. Next Biosciences, an African biotech company that conducts stem cell banking, carrier screening, and more, is the first to offer microbiome analysis locally.

"So what scientists have surmised is that if we can manipulate our microbiome, we can hopefully treat certain diseases, improve our health and prevent certain illnesses from happening. For longterm health, it's very important to manage the microbiome and revive it to its healthiest level."

According to Holt, if the gut microbiome isn't working – something called dysbiosis – it can cause numerous diseases and disorders. Inflammatory diseases, cancer, metabolic disease, liver disease and even neurological diseases can link to gut imbalance within the microbiome.

There is also direct interaction between the nervous system and the gut. This 'gut-brain axes' have been shown to modulate the development of neurodegenerative diseases such as Alzheimer's, Autism Spectrum Disorder and Parkinson's disease.

"When talking about Parkinson's or Alzheimer's, we now know that starts from what chemicals the microbiome is producing and which ones cross the blood-brain barrier," says Barrie.

"We even know that the microbiome affects the effectiveness of a drug. Drug companies are working on how to modulate the microbiome so [drugs] are more effective and have fewer side effects. These are all incredible new arenas that are now emerging and will be a big part of our healthcare [the] next several years."

Getting to better understand the microbiome is about understanding the role microorganisms play within the gut and how that in turn influences our health.

"The gut has truly emerged as a much more complex organ than once thought," explains Lila Bruk, a registered dietician and nutritional consultant in Johannesburg. "There is definitely much more awareness of the microbiome. This has been building over the last few years with more awareness of the risks of antibiotic use, as well as the face of probiotics changing from something that is only used after antibiotics, to a supplement that has benefits in its own right. We now know that both autoimmune disease and allergies can be affected by gut health."

The link between the microbiome and autoimmune disease, in particular, means that if we can manage our microbiome, then we can potentially manage the diseases that fall under it. While certain bacteria can be beneficial for most, in others, the same

UNDERSTANDING HOW GENES WORK TO IDENTIFY DISEASE CAUSES

Recent Harvard Medical School research estimates that there are more genes in the human microbiome than stars in the universe – the total number of genes in the collective human microbiome is around 232 million. Viome is about understanding how these genes work.

Founded by Naveen Jain and Deepak Savadatti in California, Viome is different to other gut tests on the market because it is a meta-transcriptome sequencing test, which means it can identify all microorganisms living in the gut – bacteria and viruses to fungi, yeast, parasites and bacteriophages – as well as their function.

"Viome is not only about identifying the genes of the bacteria, the names, it also identifies its level of activity. Other tests only provide the DNA profile of the bacteria – this goes one step further in identifying the bacteria and this is what it's currently doing," explains Holt.

With this data, through an app, Viome recommends personalized foods and supplements to optimize microbial function.

"Gene expression is what drives Viome and allows us to understand the molecular behavior and what's being produced by those trillions and trillions of microbiome bacteria... it enables us to identify the cause of a disease, and allows us to make health benefits and wellness benefits recommendations. You have to understand not only who's there, and more importantly, what they're doing," says Barrie.



bacteria can trigger an autoimmune disease.

"People say 'look after your gut', but what does that mean? There are millions and millions of microorganisms and different groups and species. We have to define it better. We have to say 'to prevent autoimmune disease, we need a higher quantity of this kind of microorganism and less of that kind of microorganism'," says Holt.

Bruk brings up a 2015 study that found the microbiome of individuals with allergies differed from those that didn't. "Generally, they had less diversity in their microbiome and this was especially the case for people with nut or seasonal allergies," she explains, adding that by focusing on improving gut health, there has been improvement found in other relevant areas such as inflammation. Analysing the microbiome could finally give dietitians the results they need to assist patients and tweak their microbiotic balance to enhance their health.

"Scientists are working on it all the time. And the more tests people take, the more information we can get from it, and truly understand the human microbiome and how it affects disease," adds Holt.

Understanding one's microbiome takes personalized healthcare to the next level but according to Dr Dean Lutrin, a Johannesburg-based surgical gastroenterologist, while the microbiome is an interesting concept, it is unclear whether it is a fad or whether it is something truly meaningful.

"My opinion is that understanding the gut microbiome will have a meaningful role at some point. Patients with irritable bowel syndrome can be given appropriate dietary advice. We also believe that the microbiome might have a causative role in colorectal cancer, obesity, diabetes. Does changing the microbiome augment that risk? We don't know – but it is worth taking seriously," says Lutrin.

"I do think that less gastrointestinal surgery could be performed



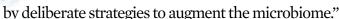
What scientists have surmised is that if we can manipulate our microbiome, we can hopefully treat certain diseases, improve our health and prevent certain illnesses from happening. For long-term health, it's very important to manage the microbiome and revive it to its healthiest level.

- Dr Yvonne Holt



There's no other single thing in our universe that has that profound effect on everything about our lives.

Dr Stephen Barrie



Ultimately, people want to take control of their health and the introduction of gut-testing offers new and interesting insights into personalized healthcare that isn't a one-size-fits-all approach.

"I think that this form of testing can prove valuable and can provide one with insights that we would otherwise not know. I believe that with time, there will be an increased focus on this sort of microbiometesting due to the type of information it provides," ends Bruk. ①



A SHOT OF HOPE?

Why convalescent plasma therapy could be key for treating critical Covid-19 patients.

BY TIANA CLINE

HE RACE TO CREATE A VACCINE FOR THE coronavirus pandemic is underway, but the likelihood of developing, manufacturing and scaling-up a successful vaccine could take a number of months to years. Experts say that Covid-19 convalescent plasma (CCP), on the other hand, is a treatment option that could be rapidly scaled and widely available throughout South Africa.

"The biggest possibility at the moment is Covid-19 convalescent plasma because if we can get plasma from those people who have already had the virus and have got the antibodies, we can then use it in our severe patients," explains Dr Anton Meyberg, a pulmonologist physician at Netcare Linksfield Hospital in Johannesburg. He adds that CCP will be used to treat patients who are not responding to baseline

medication, especially those who develop acute respiratory distress syndrome, a severe lung condition and require mechanical assistance (like a ventilator) to breathe.

The use of CCP as passive immunization to treat viral infections is not new – it was first (and successfully) used over 100 years ago during the 1918 Spanish Flu pandemic when there were no other treatment options available.

"Plasma therapy is essentially the passive immunization by providing antibodies passively to the patient – as opposed to a vaccine which is active immunization. With a vaccine, you give somebody a small amount of dead virus and their body builds an immune response to fight back. Those antibodies become their immune mechanism. In passive immunization, you give someone else's antibodies to a person to fight the virus," explains Marion Vermeulen, a South African National Blood Service (SANBS) biomedical technologist who is also co-principal investigator for the South African PROTECT Covid-19 convalescent plasma trial.

The SANBS collect non-Covid-19 plasma routinely as part of their transfusion service for the National Bioproducts Institute, South Africa's fractionator. The process is identical for when a patient has recovered (or convalesced) from Covid-19, who have Covid-19 antibodies in their blood – antibodies contain proteins the body uses to fight off infections. After being symptom-free for 28 days, they can donate plasma via a procedure called apheresis. Each CCP donation has sufficient volume to be split into two products,

so two Covid-19 patients can be treated with each CCP.

"We want to see that if we give these antibodies to patients, whether those antibodies will block the receptor that the virus uses to enter the cells and will therefore truncate the illness and hopefully give a milder disease," says Vermeulen. "During plasmapheresis, blood is collected from the donor into an instrument that can centrifuge the blood. The white and red cells are returned to the donor during the procedure and only the plasma component is collected. Because red cells are not collected, a plasma donor can donate every two weeks. We're also pathogen-reducing the product to further minimize the risk of HIV, hepatitis B and hepatitis C."

All blood products have a small risk of transfusion transmissible infections even with the state-of-the-art testing performed, which

means not everyone is eligible to donate CCP – people who have recovered from Covid-19 need to be between the ages of 18 and 65 and weigh at least 55kg and must have lived a safe lifestyle in the past three months. Unfortunately, women who have been pregnant before can't enrol in the study: "When pregnant, women can develop human leukocyte antigen (HLA) and human neutrophil antigen (HNA)

have been pregnant before can't enrol in the study: "When pregnant, women can develop human leukocyte antigen (HLA) and human neutrophil antigen (HNA) antibodies. With plasma transfusion, these antibodies have a small risk of causing a transfusion-related acute lung injury, or TRALI. Because

Currently, the SANBS has put the call-out for CCP plasma donors. They do not even have 1% of all the recoveries recorded on various South African Covid-19 statistic dashboards donating plasma. But as Covid-19 infection rates increase, they're hoping to see an increase in the number of those willing to donate and potentially save many lives.

Covid-19 is a lung disease, we don't want to exacerbate an illness in

someone who's already got a lung disease," she explains.

"The big worry at the moment is what happened in Europe and Latin America – they started the clinical trials too late. And they're now at the tail end of the epidemic and they can't get their numbers into the clinical trials and so they can't determine if it actually works. In South Africa, we have a really unique situation because the pandemic started later here. We have the opportunity to enrol many patients... but we need to have sufficient product before we start the clinical arm of the study," says Vermeulen.

The big worry at the moment is what happened in Europe and Latin America – they started the clinical trials too late.

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- 4. Tag your friends on the post. The more people you tag, the higher your chances of winning!
- 5. Share and react every engagement helps you get closer to winning!





Blockchain To Track Your Tea?

How this Tanzanian entrepreneur's tea startup is weathering the Covid-19 storm.

BY INAARA GANGJI



Tahira Nizari was forced to come up with a game-plan and quickly pivot her enterprise

started her social enterprise Kazi Yetu in Tanzania's bustling city,
Dar es Salaam, with her business partner and husband, Hendrik Buermann, almost two years ago, she didn't anticipate the sheer scope of her big idea.

But she also didn't expect that, because of an employee's exposure to the coronavirus in April, she and her entire team would be quarantining for two weeks, stalling work in a year that she had projected growth for her company. With the pandemic's onset, she lost most of her customer base in Tanzania, albeit

Right now, tea is just exported in bulk completely (from Tanzania) and then all the jobs thereafter in that value chain are done abroad. So what we said was 'let's redistribute that job creation, let's bring it back to Tanzania and let's create a facility in which we can hire workers all locally and have a product that is 100% made in Tanzania'.

Tahira Nizari

temporarily, and was forced to come up with a game-plan and quickly pivot.

"It's been an economic recession overnight, more or less," says Nizari.

With family roots in Tanzania, and armed with formal degrees from Dubai and Canada, and experience in economic inclusion in the non-profit development sector, Nizari aimed to set a benchmark in the agribusiness sector in Tanzania through value-addition and by employing local women in her factory based in Dar es Salaam to produce "a traceable product" for the local and international market.

"Right now, tea is just exported in bulk completely (from Tanzania) and then all the jobs thereafter in that value chain are done abroad. So what we said was 'let's redistribute that job creation, let's bring it back to Tanzania and let's create a facility in which we can hire workers all locally and have a product that is 100% made in Tanzania'," says Nizari. After extensive research in multiple target markets, both locally and abroad, building relationships with 250 Tanzanian farmers, setting up a factory exclusively employing local and previously-unemployed women, and many iterations of the seven blends of its flagship Tanzania Tea Collection using

local flavors and spices, Kazi Yetu was ready to expand its scope in 2020.

"We were following our business plan... but we were really cautious and risk-averse (in 2018 and 2019). And then, we said, 'you know what, when 2020 hits, it's going to be growth'."

Nizari was planning on reaching up to 4,000 farmers, buy machinery from China, grow the local B2B customer base, permanently employ all the women at the factory and begin to export on a larger scale after the launch of Kazi

Yetu's online store.

But when the coronavirus hit the local and international markets, things started looking very bleak, especially since Kazi Yetu is currently fully self-funded.

Not only did it lose almost all of its monthly income, but the farmers stopped meeting in groups for the training, so the supply chain was disrupted.

The factory also had to introduce safety protocols for employees at work and at home, as well as reduce the number of people working at any given time in order to adhere to social distancing.

An employee's father also died of the coronavirus, which forced Nizari to ask everyone involved with Kazi Yetu to quarantine at home for 14 days.

"So what we said was, 'look, we don't want to risk their safety, but we also don't want to risk their economic well-being'. So we just paid all of them their full-time salary," says Nizari.

"Generally, our operational costs have been really hard to cover right now... but it's okay, because it made us pivot."

It inspired Nizari to expedite Kazi Yetu's plans to export, kickstart the online store sooner than anticipated and build up stock to send to Germany, rather than just focus on the Tanzanian market, which is temporarily

quite small. Exporting has been an issue, given limited shipping at the moment, but the European market proved to be a pleasant surprise for Nizari.

"In Europe, people are all sitting at home. They're looking for products to build their immunity – tea is a great solution," she says.

Slowly, the factory is moving back to normal operations and Nizari is trying her best to ensure a steady income for the employees. Kazi Yetu is also now available on local delivery applications in Tanzania, so people can order tea to their doorsteps.

Looking ahead, Nizari hopes to scale up exporting through the online store and retailers, whether in Europe, or also in markets like South Africa where products from sub-Saharan Africa are popular, and North America where innovative African products are in demand.

"We want our product to be competing with products made in Europe, and for example, Sri Lankan tea, Indian tea and Chinese tea. We want Tanzanian products to be well-regarded," she adds.

Since the teas are traceable, which is a unique selling point, Kazi Yetu is also working on an app that uses blockchain to allow customers to access data on the tea they purchase, from the farm level, all the way to their cups. This way, they will know first-hand the impact the product has.

In addition, Nizari is working on a farm-hub model to build Kazi Yetu's supply chain by helping them produce better raw products through a no-interest investment that can be paid back with their final product over time.

"The whole 'economy versus safety' debate... it's something we have to think about moving forward... You can't just operate as a business that makes money, you have to think about... the well-being of your workplace, the well-being of everyone in your supply chain... And I think this is where social enterprises really come in," Nizari adds. And a hot cup of locallyproduced tea can certainly help take forward any such deliberations. **(D)**

Life Must Go On

Temie Giwa-Tubosun supplies blood to hospitals and oxygen to Covid-19 patients in Nigeria. The special deliveries arrive with doses of compassion and hope.

BY PEACE HYDE

Hence, Temie Giwa-Tubosun's business clock runs 24 hours a day, all year, delivering life-saving medical products to hospitals across Nigeria.

"We never close our doors. In the past four years, I don't remember a time when we have not had our doors open;

remember a time when we have not had our doors open; Covid or no Covid, Christmas Day or no Christmas Day," says Giwa-Tubosun, matter-of-factly, in an interview with FORBES AFRICA.

Long before Covid-19 and the reimagined focus on access



to health into Africa's remotest corners, Giwa-Tubosun had decided that if she was going to make a success of anything, it was going to be by using the power of data, technology and logistics to deliver essential medical supplies in Nigeria.

In 2016, she founded LifeBank, a healthcare delivery solution that represented the culmination of her own personal journey of heartache, tenacity and commitment.

The Nigerian-American started with supplying blood, and now delivers everything from oxygen to insulin for those in critical need of them. And now, also ventilators for serious Covid-19 patients.

"We knew we needed to be of use to our country when the coronavirus hit. I was very worried about the access to ventilators and I was doing a lot of work around making sure ventilators are available.

We called all the hospitals and put a list together to make them available to those who needed it.

"Then after that, I felt like we needed to do more testing and we partnered with mass-testing drive through testing centers LifeBank CEO.

Her latest venture is an oxygen delivery service called AirBank for Covid-19 victims. According to Giwa-Tubosun, about 40% of Covid-19 patients need oxygen and only 5% need ventilators.

"The reason people don't talk about oxygen is because in the West, access to oxygen is not a problem so there has not been a focus on it, but in Nigeria, access to oxygen is a major problem so we thought we need to make sure oxygen is available to [everyone] across the country. So, we then started what we called AirBank and started delivering oxygen to isolation centers across the country."

Born and raised in Nigeria, in her formative years, Giwa-Tubosun shifted to the United States (US) with her five siblings when her mother won the US visa lottery, allowing the family to escape a life of poverty in Nigeria.

"It was a nice childhood but things got bad when my parents stopped getting paid as teachers and we got really poor," recalls Giwa-Tubosun.

Her new life in the US, the land of dreams, gave her purpose.

After obtaining a Masters in Public Administration from the Middlebury Institute of International Studies at Monterey, Giwa-Tubosun joined the World Health

Organization (WHO) in Switzerland, where she worked on health financing, before moving on to a firm in Minnesota back in the US where she was responsible for health systems and technologies.

Then came a fellowship with Global Health Corps, a non-profit organization founded by Barbara Bush, the daughter of former US president George W Bush. Here, Giwa-Tubosun was part of a group of young leaders in global health for about a year before joining the United Nations Development Programme (UNDP) in Uganda, where she worked on health supply chains before moving to Nigeria, to get married. After a stint working in healthcare with Lagos State as an operations manager, she decided to give motherhood a try.

"I went back to Minnesota to have my child but it was a very difficult pregnancy. I had a lot of complications; he was

It was a nice childhood

but things got bad

when my parents

got really poor.

stopped getting paid

as teachers and we

born very early and I was on bed-rest for a while and it was through this period that I started thinking more about my health."

And the health of other mothers like her.

After doing some research around maternal health, she found that the number one cause of maternal death was postpartum hemorrhage, a condition in which a woman bleeds heavily after giving birth.

"It is a very big problem and has the highest [incidence] of maternal death. Other causes of maternal death take about

five hours but this one is very quick," says Giwa-Tubosun.

"The data is that eight out of 10 women who have postpartum hemorrhage in Africa could be saved with access to blood."

LifeBank uses a supply chain system that can make costeffective deliveries of critical supplies round the clock in every village, town and city across the country.

"We have saved over 5,000 people. And you will see little cards on the walls [in our office with] the names of the persons we saved and the date we saved their lives, so this impact is one of the most important things for me," says Giwa-Tubosun, who recently was also adjudged sub-Saharan Africa winner of the 2020 edition of the Cartier Women's Initiative.

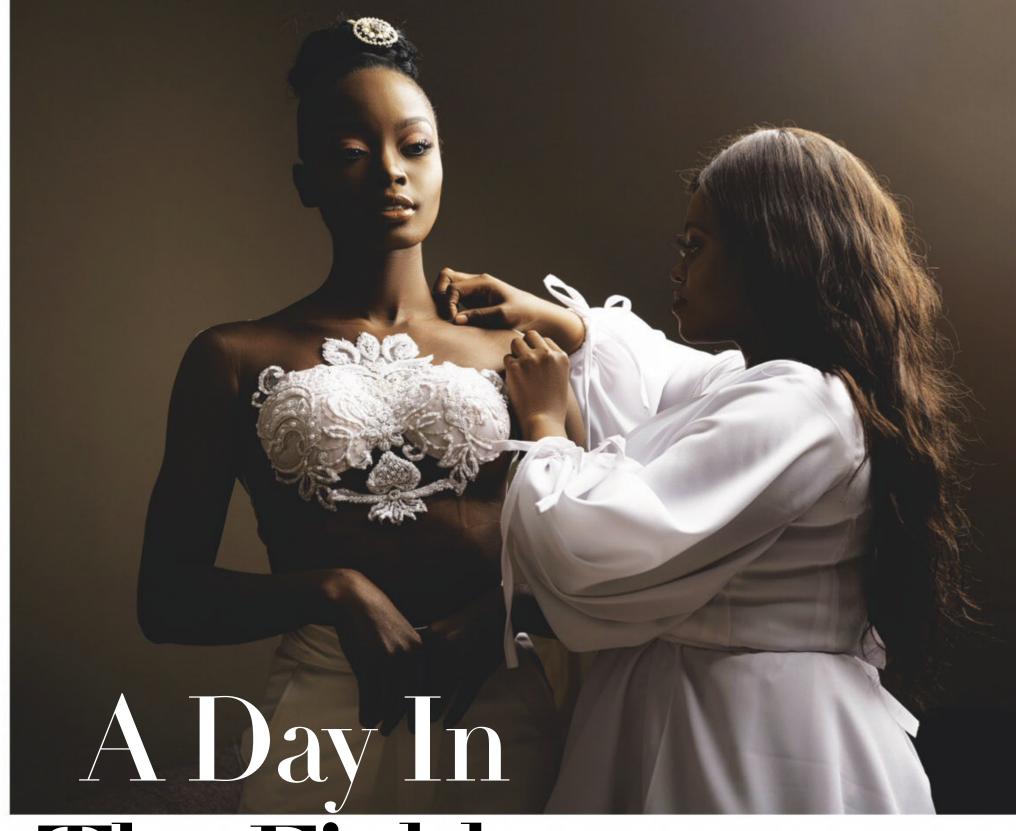
But she has no time to rest on her laurels. She says she continues to seek ways to reach out to those who do not have easy access to good healthcare services.

"It's been incredibly gratifying to do this work," says Giwa-

Indeed, her words matter, at a time when passion and compassion must surely overtake commerce.

other agencies and pushed for the first

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The Fields, A Lifetime In Fashion

Tsholanang Mathibe never let her humble upbringing come in the way of her big dreams designing for the rich and famous in South Africa.

BY MOTLABANA MONNAKGOTLA

ICTURE THIS.

Somewhere in Kanana, a rural village in the innards of South Africa's North West province, a young girl takes a break from a routine day out playing in the fields with her friends, and accidentally leafs through the fashion pages of a glossy magazine, awe-struck by the style and design aesthetics of the big city. And she plans her life in that one moment.

Today, at 29, Tsholanang Mathibe is a fashion entrepreneur and founder of Blackmarble Designs in South Africa's capital Pretoria, designing for brides and businesswomen, but still recalling that day in the sun when life shone her career path.



"

The fashion journey is tough, and the fact that people don't talk about that side of the industry baffles me, because when I was in high school, I thought it was all glitz and glamor.

- Tsholanang Mathibe

"I've never seen myself doing anything else from the age of nine," says Mathibe.

The coronavirus-induced economic downturn in South Africa has no doubt affected her business as well, but it is a good time to reflect on how far she has come, and how much farther she wants to go.

"Lockdown has affected business greatly because most of our clients get garments done to attend special events. With [not many of those events happening], people are sceptical [about] purchasing costumed clothing," she says.

Mathibe is now fashioning face-masks and recently rented out a wedding gown for a private ceremony.

Her formative years were tough. After high school, she moved to Pretoria for a B.Tech in Fashion Design at the Tshwane University of Technology. It was not easy adjusting to life in the city and the challenges of higher education. She even briefly mulled switching careers to deejaying, but her mother

motivated her to stay the course.

"The fashion journey is tough, and the fact that people don't talk about that side of the industry baffles me, because when I was in high school, I thought it was all glitz and glamor, until I got to varsity."

When it came to finally starting her own business and choosing a name for her brand, she harked back to her maths classes in school, when her teacher, in discussing numbers, always referred to marbles.

Mathibe used it in conjunction with black, her favorite color, and Blackmarble Designs was born.

The maths teacher had also shown interest in the young creative that Mathibe was and arranged for her to meet with fashion designer, Ephraim Molingoane of Ephymol, a menswear fashion label.

Blackmarble was registered in 2013 when she was still in her final year, and commenced operations in 2014.

"I was helped by the fact that I won an industrial sewing machine for a fashion range I had produced during my third year, when students showcase their work. I won the best innovation award. That helped me start my business."

In the first year of operation, Mathibe was working out of her





aunt's backroom in Soweto, sleeping alongside her equipment and waking up to work all day or night.

"I spent most of my time in that room doing mostly ready-towear garments to showcase and sell at social markets between Johannesburg and Cape Town. A client then referred South Africa's popular radio deejay, DJ Sabby, to me. He needed an outfit for the J&B MET. That was my first celebrity client," she recalls.

The following year, she moved back to Pretoria to live with her partner. Business was picking up and she enjoyed making bespoke outfits rather than ready-to-wear. She also started promoting the brand online to reach a wider audience; things were getting better and the business had momentum.

"I am still using my home as my studio, and in 2019, the

business got its first bridal client and since then, that was the market we were mostly [focusing] on before the lockdown," she says.

Her first client for a bridal outfit was Lindiwe Sibiloane, who had seen a matric dance garment that Mathibe had designed.

"I was looking for something very similar to that [matric dance garment]; then I asked her to do a bridal gown, and she did it. I am still happy about it, everyone was raving about that dress; they still are," says Sibiloane.

Mathibe's bridal gowns cost upwards of \$1,000.

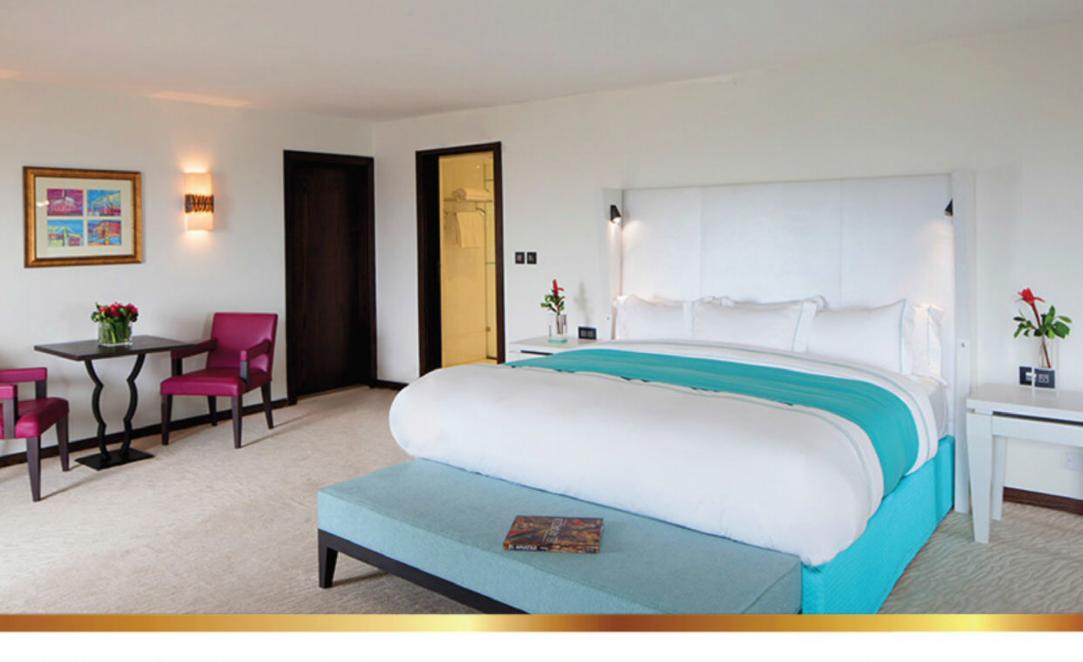
So far, Blackmarble Designs has also dressed FORBES AFRICA 30 Under 30 alumna such as South African actor Thuso Mbedu and Reabetswe Ngwane, co-founder and MD of Kreamfields, who incidentally, Mathibe has known from primary school.

Mathibe dressed Ngwane for the glamorous Veuve Clicquot Masters Polo social event in 2019.

"I told her I needed a dress. I gave her a brief the week of the event. I sent her a few pictures I had seen on Pinterest. A few days later, the dress was done to the 'T' and didn't need any adjustments, save for a button," says Ngwane.

Somewhere in Kanana, a young girl must be reading this article now and being suitably inspired, just like Mathibe had been, all those years ago. ①





CEKO Signature CEKO SUITES CEKO HOTEL CEKO GARDENS

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...nesting international standards with African hospitality

Photo by Janie Osb

INTELLIGENCE AGENTS

Normally, humans train artificial-intelligence systems to replace them. ASAPP's software trains customer-service reps to be better humans.

BY ALAN OHNSMAN AND KENRICK CAI



F YOU'VE EVER FELT YOUR BLOOD BOIL AFTER sitting on hold for 40 minutes before reaching an agent... who then puts you back on hold, consider that it's often even worse on the other end of the line. A customer-service representative for JetBlue, for instance, might have to flip rapidly among a dozen or more computer programs just to link your frequent-flier number to a specific itinerary.

"Imagine that cognitive load, while you have someone screaming at you or complaining about some serious problem, and you're swiveling between 20 screens to see which one you need to be able to help this person," says Gustavo Sapoznik, 34, the founder and CEO of ASAPP, a New York City-based developer of AI-powered customer-service software.

Sapoznik remembers just such a scene while shadowing a call-center agent at a "very large" company (he won't name names), watching the worker navigate a "Frankenstack" patchwork of software, entering a caller's information into six different billing systems before locating it.

"That was an eye-opening moment."

The problem has only gotten worse during the pandemic.

Call centers for banks, finance companies, airlines and service companies are being overrun. Call volumes for ASAPP's customers have spiked between 200% and 900% since the crisis began, according to Sapoznik. Making call centers work isn't the sexiest use of cutting-edge AI, but it's a lucrative one.

According to estimates from Forrester Research, global revenues for call centers are around \$15 billion a year. In all, ASAPP has raised \$260 million at a recent valuation of \$800 million, per data from Pitchbook. Silicon Valley heavy hitters including Kleiner Perkins chairman John Doerr and former Cisco CEO John Chambers are on ASAPP's board, along with Dave Strohm of Greylock and March Capital's Jamie Montgomery.

Clients include JetBlue, Sprint and satellite TV provider Dish, all of whom who sign up for multiyear contracts contributing to ASAPP's estimated \$40 million in revenue, according to startup tracker Growjo.

ASAPP has drawn this investor interest by flipping AI on its head. For years engineers have perfected artificial intelligence to perform repetitive tasks better than humans. Rather than having people train AI systems to replace them, ASAPP makes AI that trains people to be "radically" more productive.

"Pure automation capabilities are [used] out of an imperative to reflect costs, but at the expense of customer experience. They've been around for 20 or 30 years but they haven't really solved much of the problem," Sapoznik says. ASAPP's thinking: "If we can automate half of this thing away, we can get to the same place by making people twice as productive."

The company is a standout on *Forbes*' second annual AI 50 list of up-and-coming companies to watch, rated highly for its use of artificial intellig/0ence as a core attribute by an expert panel of judges. Its focus on using AI to keep humans in the loop is also what sets ASAPP



Imagine that cognitive load, while you have someone screaming at you or complaining about some serious problem, and you're swiveling between 20 screens to see which one you need to be able to help this person.

Al 50: America's Most Promising Artificial-Intelligence Companies

ABNORMAL SECURITY

CYBERSECURITY

Scans inboxes for malicious emails.

AISERA

WORKFLOW SOFTWARE

Automates IT, sales and customerservice tasks.

AMP ROBOTICS

ENVIRONMENTAL ENGINEERING

Makes robots that identify and sort recyclables.

ANDURIL INDUSTRIES

DEFENSE

Builds surveillance systems for national-security purposes.

ANYSCALE

SOFTWARE DEVELOPMENT

Helps software developers make machine-learning apps.

ASAPP

CUSTOMER SERVICE

Assists customer-service agents in real time.

ATOMWISE

HEALTH CARE

Discovers drugs with medical potential.

AURORA

AUTOMOTIVE

Makes software for self-driving cars.

BIOFOURMIS

HEALTH CARE

Monitors patients' health using wearables.

BLUE HEXAGON

CYBERSECURITY

Detects network or cloud cyberattacks.

CEREBRAS SYSTEMS

HARDWARE

Builds computing chips for AI use.

CRESTA

CUSTOMER SERVICE

Assists customer-service agents in real time.

DATAIKU

SOFTWARE DEVELOPMENT

Develops tools for enterprises to build Al apps.

DATAROBOT

SOFTWARE DEVELOPMENT

Makes software for companies to develop AI models.

DEEPMAP

AUTOMOTIVE

Produces 3D maps for self-driving vehicles.

DOMINO DATA LAB

SOFTWARE DEVELOPMENT

Provides tools for data scientists.

DOXEL

PRODUCTIVITY SOFTWARE

Detects and tracks constructionproject problems.

DRIFT

PRODUCTIVITY SOFTWARE

Builds chatbots to automate customer interactions.

DRISHTI

PRODUCTIVITY SOFTWARE

Creates data sets by digitizing human actions in factories.

EMBARK TRUCKS

AUTOMOTIVE

Creates software for self-driving trucks.

EXTRAHOP

CYBERSECURITY

Detects cloud cybersecurity threats.

FIDDLER LABS

SOFTWARE DEVELOPMENT

Helps companies build and monitor Al apps.

GENESIS THERAPEUTICS

HEALTH CARE

Discovers drugs with medical potential.

GHOST

AUTOMOTIVE

Puts self-driving tech into conventional cars.

GONG

PRODUCTIVITY SOFTWARE

Analyzes sales conversations.

HIVEMAPPER

DATABASE SOFTWARE

Turns video footage into 3D maps.

ICERTIS

PRODUCTIVITY SOFTWARE

Analyzes businesses' contract risks.

KARIUS

HEALTH CARE

Looks for pathogens in blood tests.

KRISP TECHNOLOGIES

COMMUNICATION SOFTWARE

Removes background noise from calls.

LEMONADE

FINANCIAL SERVICES

Sells insurance using bots.

LILT

PRODUCTIVITY SOFTWARE

Assists human language translators.

MOVEWORKS

PRODUCTIVITY SOFTWARE

Resolves IT tickets autonomously.

NURO

AUTOMOTIVE

Produces self-driving delivery robots.

OBSERVE.AI

CUSTOMER SERVICE

Analyzes customer-service calls.

PONY.AI

AUTOMOTIVE

Makes software for self-driving cars.

RECURSION

HEALTH CARE

Discovers potential drugs for rare diseases.

SAFEGRAPH

DATABASE SOFTWARE

Creates data sets by tracking commercial spaces.

SCALE AI

SOFTWARE DEVELOPMENT

Helps engineers speed up Al development.

SHIELD AI

DEFENSE

Makes mapping drones for national security.

SIGOPT

SOFTWARE DEVELOPMENT

Develops software for enterprises to build AI models.

SYNACK

CYBERSECURITY

Spots cybersecurity vulnerabilities.

TEXTIO

PRODUCTIVITY SOFTWARE

Gives suggestions on how to improve writing.

TUSIMPLE

AUTOMOTIVE

Builds self-driving trucks.

TWOXAR

HEALTH CARE

Discovers drugs with medical potential.

UIPATH

WORKFLOW SOFTWARE

Creates bots that carry out repetitive processes.

UNITY TECHNOLOGIES

SOFTWARE DEVELOPMENT

Provides software for app or game development.

UPSTART

FINANCIAL SERVICES

Partners with banks to price loans.

VISE

FINANCIAL SERVICES

Offers financial planning and management.

VIZ.AI

HEALTH CARE

Analyzes stroke risk from brain images.

ZEBRIUM

PRODUCTIVITY SOFTWARE

Detects and resolves software problems.

apart, although it's competing in the same call-center sandbox as fellow AI 50 listees Observe.ai of San Francisco and Cresta, which is chaired by AI legend Sebastian Thrun, the Stanford professor who greenlit Google's self-driving car program.

ASAPP's focus is natural language processing and converting speech to text using proprietary technology developed by a group led by a founding member of the speech team for Apple's Siri.

Its software then displays suggested responses or relevant resources on a call-center agent's screen, minimizing the need to toggle between applications.

Sapoznik and his engineers also studied the most effective human representatives, trying to replicate their expertise into ASAPP software via machine learning. That software then coaches call-center staff on effective ways to respond to customer queries and tracks down critical information.

If a caller asks how to cancel a flight, for example, ASAPP software automatically pulls up helpful documents for the agent to browse. If a customer reads a 16-digit account number, it's instantly transcribed and displayed on the agent's screen for easy reference.

When things go right, companies using ASAPP technology see the number of calls successfully handled per hour increase from 40% to more than 150%. That can mean lower stress for callcenter workers, which in turn reduces the high turnover associated with that line of work.

A licensed pilot with a fondness for classical music who studied math at the University of Chicago,

Sapoznik first applied his coding skills to his family's real estate and financial business in Miami.

"I'd been doing some work in investments where you build machine-learning product capabilities to trade the markets. The impact there is that there's a number that goes up or goes down," he says.

Merely making money didn't excite him.

Sapoznik hopes that optimizing call centers is just a start for ASAPP, which he founded in 2014.

He's actively searching for similar "gigantic-size" business opportunities with "brokenness and tons of interesting data." He thinks ASAPP can do that because it's built like a research organization — 80% of its 300 employees are researchers or engineers.

"The exciting thing about ASAPP is not so much what they're going after now, but whether or not they can go beyond that," says Forrester analyst Kjell Carlsson. "They, like so many of us, see the incredible potential of [using] natural language processing for augmented intelligence."

Summarizing ASAPP's potential, Sapoznik draws on his experience as a pilot — in aviation, automation has steadily transformed the cockpit.

"It's increased safety from a pretty dramatic perspective, and it hasn't gotten rid of pilots yet," he says. "It's just taken away chunks of their workloads."



'Business Meetings Might Move To A More Hybrid Set-Up'

As chair of the global steering committee of the Radisson Hotel Group, which includes over a thousand hotels worldwide, **Federico J. González** must have his hands full – especially at this time when the hospitality industry is in the doldrums globally. The marketer and author, who's the President and CEO of Radisson Hospitality AB, tells us more about how hotels will change permanently.

What is your forecast for the hotel economy and your group as a whole?

I believe that hotel operations will change permanently. We have all had to adapt and act together as a global community for the health and safety of our neighbors, families and friends. Operations have and will continue to change as we continue to apply the Radisson Hotels Safety Protocol and recommendations of the World Health Organization and local health authorities. These will change hotel operations such as check-in, F&B outlets, gyms, spas and more with regard to social distancing, maximum capacity for common spaces and increased disinfection and cleaning. There will be a heightened awareness around safety... That will be the most important deciding factor for travelers which needs to be at front of mind operationally. The Radisson Hotel Group is one of the largest hotel groups in the world, so for us, it's imperative to ensure a common high standard of hygiene, safety and sanitation that is standardized and implemented around the world and validated by a third-party like SGS (global inspection, verification, testing and certification company).

What about the tourism industry in general and the new thinking that will revive it?

There are so many countries, companies and airlines that rely on travel, tourism and the hospitality industry. Many airlines and hotels are encouraging guests to start traveling again to reignite the travel industry and its future recovery. There is a strong appetite for travel and it's great to see hotels reopen and people traveling again.

Looking ahead, health and safety will continue to be the most important deciding factor when booking a holiday. We are seeing people take smaller trips where they can get in their car, a train or a plane for a short journey. They want to ensure they will feel safe before getting on a long-haul flight. Given the economic climate post Covid-19, many people may not be able to travel as much, which means they will either look to take smaller mini-breaks, invest in one holiday or spend the time discovering their own country.

The pandemic has accelerated the adoption of technology within businesses, small or large, and we all had to learn how to work from home full-time from one day to the other, so I believe the way people meet will also change. There will always be a need for physical meetings and interactions, but business meetings might move to a more hybrid set-up, maybe with smaller teams getting together in one location and connecting with the others via videoconference.

What are the opportunities/trends coming out of this crisis?

Our whole world has been greatly impacted and the expansive global scale of Covid-19 is unprecedented. We have seen positive news coming from Asia and Europe with the reopening of some of our hotels and we will see further hotels start to open up as restrictions are lifted.

I feel there is a real opportunity for brands to stand by and clearly communicate their brand values and positioning to consumers.

Consumers need to believe in your brand, in your health and safety commitment and that you will deliver on your promises.

What is your strategy for 'doomsday' should the worst happen?

Prior to Covid-19, we had a strong crisis management process and flexible cost model in place. Of course, no one could have predicted the global scale of this pandemic and the daily changes to our business, the world and life. With our global scale of over 1,100 hotels in operation and another 300 in the pipeline across the world, we had a global macro viewpoint of the pandemic and the different responses. We also have the full support of our shareholders for any financial needs until the expected end of the crisis.

What lessons do you think are there in it for all of us?

Covid-19 has brought out the best in many people around the world. It has been uplifting to see communities come together in support of key workers and medical professionals, rallying around each other. We have seen this especially in the hospitality industry which has been one of the most affected.

My hope is that we don't forget this remarkable resilience, commitment, integrity and, most importantly, kindness and generosity towards the local communities where we operate and live in. •

- Interviewed by Busi Lethole

The Secret Formula For Changing Lives In Africa

When Covid-19 struck, Coca-Cola, which has dominated FORBES' lists as one of the world's most valuable brands and innovative companies, deployed its resources and leveraged its distribution networks to make a difference in Africa's economies and communities. Here's how they did it.

FORBES' lists for years as one of the world's most valuable brands and innovative companies. A brand that has dominated pop culture and our collective consciousness for as long as we can remember.

When the world encountered Covid-19, the company was quick to collectively mobilize its resources and swing into action, donating support and lending a helping hand to Africa's communities, where it was needed the most.

Across the continent, in partnership with NGOs, its bottling partners and The Coca-Cola Foundation (TCCF), The Coca-Cola Company has been deploying resources, including capabilities, funds and products to support governments, communities and local economies in their urgent efforts to contain the spread and impact of the coronavirus.

"We are a very human-centric company. We always try to understand people. The first thing we did was to stop advertising. We went off air. We went dark. We did this to free up funds to donate money – that was what was needed," says Stephan Czypionka, Business Unit Marketing Director: Southern & East Africa, who adds that this is the first time this has ever happened in the 15 years he has been working for The Coca-Cola Company.

And how is it doing it? By leveraging its extensive distribution networks to get much-needed items such as food parcels, personal protective equipment (PPE), beverages, relief water and hand sanitizers to vulnerable communities, and by applying marketing expertise to entrench life-saving behaviours.

During the pandemic, bottling partners of The Coca-Cola Company, Coca-Cola Beverages Africa in Uganda and Ethiopia, Bralima in the DRC, Les Brasseries du Congo in the Congo, and Nigerian Bottling Company in Nigeria also deployed their technical expertise and facilities to produce over 30,000 litres of alcoholic sanitizers in line with World Health Organization (WHO) standards and have been distributing it to governments and vulnerable communities free of charge. "A lot of work went into the background but the impetus was that this was a clear need because in many of the countries across Africa, the sanitizers were just too expensive," explains Camilla Osborne, Head of

Communications, Coca-Cola Southern & East Africa. "Hygiene and sanitation is one way to take a preventative measure against the virus."

For over a decade, the company has been working with various NGOs across 42 countries in Africa through the Coca-Cola Foundation's water and sanitation flagship program, the Replenish Africa Initiative (RAIN). Using RAIN's learned expertise, unique emergency hand-washing stations (some foot-operated, some using jerrycans), were developed and set up in high-traffic areas, at border points and in areas with vulnerable communities. In addition, the Coca-Cola System is providing funding and other forms of support to help bolster the small, medium and micro enterprises in the retail, hospitality and recycling sectors, who have been among the hardest-hit businesses across countries.

"We are not immune to the economic effects of this pandemic. Since the beginning of April, the Coca-Cola System globally has experienced a volume decline of approximately 25%... The impact for 2020 is not entirely clear for us at this stage. However, it depends on how quickly the local economies can get back up and running," says Jacques Vermeulen, CEO of Coca-Cola Beverages Africa. "We're are confident we can emerge stronger and more resilient than we were before."

"We understand the level of impact that Covid-19 will have on communities, health systems and economies. We've partnered with governments and NGOs locally to make sure that we respond and support disadvantaged communities, primarily, to support themselves," explains Dorcas Onyango, Head of Sustainability, Coca-Cola Southern & East Africa. "We're already thinking how we can support small and medium enterprises which are very important, across Africa, going forward. Our commitment to communities will not go."

In total, the Coca-Cola System and The Coca-Cola Foundation have committed (approximately) \$17 million across Africa in response to Covid-19 to help those most vulnerable, preventing the spread of the virus and contributing to the recovery of the local economies.

"This is just the start of our fight. Once communities and people are safe, The Coca-Cola Company will work to get shop owners, retailers and other small businesses in the food and beverage sector back on their feet," says Bruno Pietracci, the President of Africa & Middle East for The Coca-Cola Company. In a world where compassion has become the new currency, this surely is a fitting example of corporate Africa stepping up for positive change. \blacksquare

– By Tiana Cline

Thinking Out Of The Box:

Creating Shared Value And A Country Of Entrepreneurs

Coca-Cola Beverages South Africa's initiative, Bizniz in a Box, meaningfully empowers youth and women to create and scale viable micro-businesses in the country's communities.



are the small, medium and micro enterprises (SMMEs): they power the future and fortify the foundation of the present. So any effort to ameliorate the circumstances of the SMME sector and uplift the players in that space, especially in these times of a ravaging pandemic, can be a much-needed economic panacea.

With the unemployment rate among young South Africans sitting at more than 59%, as President Cyril Ramaphosa said in his 2020 State of the Nation address, it is a national crisis that demands urgent, innovative and coordinated solutions: "Of the 1.2-million young people who enter the labour market each year, approximately two thirds remain outside of employment, education or training. More than half of all young people are unemployed," said the President.

And with the Covid-19 pandemic, these numbers are getting exponentially worse, and is a problem that needs interventions from both the public and private sectors. As a company, it's high

Above: The Paradise Corner Cafe in Nelson Mandela Bay, owned by Asanda Ntsendo up on the agenda for Coca-Cola to play its part in this ecosystem of 'coordinated solutions', empowering and mainstreaming the youth to make them valuable players in the country's economy and make sure they are fully integrated.

"Youth unemployment is very high in our country and it's untenable. While it isn't just a South African phenomenon, we have to work together as industry, government and civil society to manage it. We have to exploit our demographic dividend and give young people meaningful livelihoods for them to become productive members of society", says Velaphi Ratshefola, Managing Director at Coca-Cola Beverages South Africa (CCBSA).

Coca-Cola's approach to growing communities has always been through empowerment. To target the issue of youth unemployment, one of Coca-Cola's bottling partners, Coca-Cola Beverages South Africa's (CCBSA) Youth Entrepreneurship Programme created Bizniz in a Box, an initiative launched in 2015 specifically focusing on youth and women empowerment and which has, to date, trained over 700 young entrepreneurs and helped 122 of them take their businesses to the next level.

A report by Euromonitor International reveals that informal convenience shops, known locally as spazas, contribute an estimated R7 billion annually to South Africa's economy. Thus, using a spaza shop as the anchor, Bizniz in a Box aims to create an ecosystem of viable micro-businesses offering complementary products and services in a community. Each business operates out of a custom-designed container. "We want to do business the right way, not just to do business for the sake of business or sustainability as an exercise to tick off... we want to create shared opportunities. Bizniz in a Box is a start-up kit and it's very different. We go out to communities and put a call out for youth who are unemployed or who run their own small businesses. We want to help formalise this," explains Tsholofelo Mqhayi, Head: **Enterprise and Community Development** at CCBSA.

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We need to collectively develop solutions that will not only uplift young people but bring much-needed structural change to communities.

Velaphi Ratshefola, Managing Director,
 Coca-Cola Beverages South Africa

In South Africa, Bizniz in a Box started in Welkom and has expanded to Rustenburg, East London, Mthatha, Port Elizabeth, Bushbuckridge, Newcastle, Merafong and Vosloorus. The journey to owning this business begins with a rigorous screening process to identify candidates within a community that CCBSA is targeting. Shortlisted candidates must be aged between 24 and 35, be resident in the community they want to conduct their business in and must have some form of entrepreneurial experience. Diversity is a vital component of the program as it forms part of a journey towards a diverse business and social environment – 30% of the program participants must be female.

"While there are no 'institutional' barriers that hinder women's progression in the workplace in South Africa, we cannot ignore the fact that there are systematic and entrenched obstacles preventing young women from getting ahead in the world of work and business. For many, their brilliance, aspiration, passion and drive are not enough. Hence, our concerted effort to ensure women are included and supported throughout the journey," adds Ratshefola.

The assessment process is robust and is conducted to give all candidates a chance to show their potential in a live environment. The shortlisted candidates are taken on a boot camp to acquire the basic entrepreneurial skills they need to manage their business. Those that proceed into the final phase will work in the microbusiness they have chosen. Each business operates out of a specially-designed container stocked by CCBSA and its partners. The young entrepreneurs are assisted to comply with all legal and regulatory requirements. Once an agreement is signed, they take legal ownership of the container and commence their interest-free repayments.

"We are not looking to give out grants, we are offering an opportunity for committed young entrepreneurs to access the skills and funding they need to reach their potential. Loans are granted and ongoing business management skills are provided to ensure the success of their businesses. We believe that the willingness to take on the debt is an important indicator of the calibre of the person we want to support," explains Mqhayi. An important element of the program is its ability to create employment, not only for the entrepreneurs but other young people in their communities as well.

Asanda Ntsendo is one of the beneficiaries of Bizniz in a Box. Her small shop, Paradise Corner Café, specializes in groceries, hot food and prepaid airtime. "I already had a little tuckshop. This is an upgrade from what I was already doing. My customers really appreciate our service because it's quick, the environment is clean and the food that we sell to them is freshly-made. I have two employees – one is part-time and the other is full-time," says Ntsendo. "One of the things CCBSA had us do was a survey of where we wanted our businesses to be. We were able to identify from the customers what they would prefer. This is how we chose our menu. The ultimate goal for me is to have a coffee shop restaurant."

"Our primary focus is to see these young entrepreneurs grow their own businesses as well as own multiple stores. To see them grow and not just do one thing – how do they become distributors? How do we contribute to the fourth industrial revolution? As a business, we would like to collaborate with more organizations and bring more partners on board. Youth entrepreneurship is not just a Coca-Cola priority, it's a South African priority and contributes meaningfully to enhancing the quality of life and the Sustainable Development Goals in terms of poverty alleviation," adds Mqhayi.

The impact of the coronavirus pandemic has had dire consequences on businesses including small businesses in the townships, while the South African government allowed for the reopening of spaza shops early on to cushion the effects of the crisis.

"To get spaza shop owners back on their feet, we're looking at three areas of support: to provide safety and health equipment within the stores, the second one is around working capital – trying to build that critical mass of financial support. And lastly, to drive traffic – to make sure that consumers are aware that these stores are open and safe. They're the small giants of these communities," ends Camilla Osborne, Head of Communications, Coca-Cola Southern & East Africa.

– By Tiana Cline



Where All Routes Lead To Good Health

Through the Project Last Mile partnership, Coca-Cola works with African governments to leverage its extensive distribution network to deliver health commodities and life-saving medication to the continent's remotest regions.



Project Last Mile uses Coca-Cola's logistical, supply chain and marketing expertise to improve the reach of health services in Africa

cross Africa, Governments and Donors are investing billions of dollars to strengthen health systems and make affordable medicines available. However, government supply chains often struggle to get medicines and supplies to the health facilities and people who need them most. Project Last Mile was created in 2010 to leverage and share core private sector expertise to improve health systems across

In Africa, a Coca-Cola product is available almost everywhere on the continent, yet, according to the World Health Organization (WHO), nearly 50% of people lack access to life-saving medicines.

So when big names, ideas and purpose meet, life-changing initiatives result, and Project Last Mile is one such initiative.

"Project Last Mile is a unique blend of incredible partners. Our donor partners are The Global Fund, The United States Agency for International Development (USAID), PEPFAR and The Bill and Melinda Gates Foundation, The Coca-Cola Company and Coca-Cola Foundation, local implementing partners and health ministries," explains Adrian Ristow, Project Last Mile's Director.

To do this, Project Last Mile leverages the logistical, supply

chain and marketing expertise of the Coca-Cola system to improve the reach and uptake of life-saving medicines, including HIV medicines, and health services in Africa. By transferring the skills and knowledge from the Coca-Cola network to the health ministry partners and customizing solutions, Project Last Mile has, over the last 10 years, completed interventions in 10 different countries. They currently have active programs in the Kingdom of eSwatini, Mozambique, South Africa, Tanzania, Sierra Leone and Lesotho.

"Our areas of focus for Project Last Mile are two-fold. The first is around the concept of route-to-market. It's about distribution, ensuring you get a commodity in the most effective and efficient way to the point of need. We bring best practices, ideas and experiences from the way that Coca-Cola does its business on the continent to help ensure that life-saving medicines get to clinics and hospitals.... to wherever that point of need may be," says Ristow. "The second point is about strategic marketing and creating demand. It's not only important to make sure medicines are available, you need to make sure that people are accessing the services provided through the public health sector. Our focus is on supporting demand creation initiatives tied to HIV/AIDS-related health services."

Africa in a sustainable way.

In Mozambique, Project Last Mile supported the Central de Medicamentos e Artigos Médicos (CMAM) and local partners to design and pilot supply chain solutions. Project Last Mile has applied best practises in route-to-market and logistics based on what Coca-Cola would use to map distribution for a Coca-Cola product bringing together CMAM, the Global Fund, Village Reach, Coca-Cola service providers and Coca-Cola Beverages Africa (the local Coca-Cola bottler) to design and scale supply chain solutions that leverage private sector practises, methods and tools for the public sector.

"We are physically visiting every single health center and hospital in the country, not only to verify its GPS location but also to understand the condition of the roads and the high-risk points of interest in terms of the wet season versus the dry season in order to access those health centers," explains José Neves, Project Last Mile's Mozambique Country Lead. "To this stage, we have completed nine of the 11 provinces in Mozambique. Project Last Mile is committed to building CMAM's capacity in a sustainable way through skill-building initiatives and equipping them with the necessary tools and software to strengthen their supply chain management."

Project Last Mile's activities have contributed to savings in the distribution costs of medicines and improved routing for vehicles according to seasonal needs. In-depth GPS data was collected to determine the optimal location for intermediary warehouses and ideal routes for vehicles and deliveries. Dr Brana Branquinho, CMAM's Deputy Director, adds that Project Last Mile has helped to address some of the supply chain challenges. One of those challenges was in terms of evaluating and assessing the routes that are used and how these routes are being optimized.

"Distribution to the last mile is an important part of our revised pharmaceutical distribution strategy here in Mozambique. They also assist with the type of contracts where we might need to use a third party distribution model for the last mile," says Branquinho. "This is where Project Last Mile has really helped in terms of the development of new capabilities and route optimization skills."

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We bring best practises, ideas and experiences from the way that Coca-Cola does its business on the continent to help ensure lifesaving medicines get to clinics and hospitals... to wherever that point of need may be.

Adrian Ristow ,
 Project Last Mile Director

From the CMAM Zimpeto National Warehouse just outside of Maputo, medication gets distributed to the 11 provinces in the country. Project Last Mile's support to CMAM has helped reshape the delivery of medicines across the country. Project Last Mile has also catalysed stronger collaboration and communication across public and private sectors, contributed to increased savings on distribution costs, and more timely and efficient deliveries of medicines. It has also developed innovative ways of working, including strategic use of data, and creative problem-solving to better serve patient needs and expand access to life-saving medicines.

With so many Mozambicans directly impacted by Project Last Mile, Neves's ultimate wish for the country is the implementation of a long-term and strategic plan for the distribution of medication – also known as PELF (Strategic Plan for Pharmaceutical Logistics). From both a marketing and distribution perspective, Project Last Mile is delivering on its promise of making life-saving medications more easily available throughout many African countries, not just in Mozambique.

In Tanzania, Project Last Mile was piloted with the Medical Stores Department (MSD) of Tanzania in 2010 and has helped transform the delivery of medicines from 130 regional hubs to over 5,700 health facilities, including those in hard-to-reach areas.

"Given that Coca-Cola is widely seen as one of the best distributors of products across Africa, the Global Fund saw the potential to learn from Coca-Cola's business models through a pilot in Tanzania," adds Ristow.

Project Last Mile has also supported South Africa's Department of Health's Central Chronic Medicine Dispensing and Distribution (CCMDD) program to improve access to antiretrovirals for people living with HIV. This program has delivered medicines to more than three million people living with HIV across the country, and CCMDD's pick-up points across the country have dramatically increased since 2016, from 180 to 1,800 in 2020.

Built on the foundation of The Coca-Cola Company's business success in Africa, Project Last Mile has developed unique intellectual property, donor leadership and collaboration. With its strong local talent, public health experience and private sector insight, Project Last Mile is effectively supporting African governments to build their supply chain and strategic marketing capability.

"Our mandate is to build deep and sustainable solutions. A key principle of our model is to be demand-driven, and we rely heavily on our development partners to identify countries with both a need and the desire and commitment to make changes. Therefore, while we continue to explore new country opportunities, in the future, we are not going to put a specific number as a target because we are also highly committed to deepening and strengthening the engagement and support in our current countries," says Ristow. "This allows us to continue to develop models for other private sector partners to become involved. We are extremely excited and committed to continue to expand the impact of Project Last Mile together with the Global Fund and our other partners."

– By Tiana Cline

Going The Extra Mile In eSwatini

In the heart of landlocked eSwatini, Coca-Cola, through its partnership with Project Last Mile, is helping to reduce the incidence of HIV and turning young girls into empowered champions and leaders of the future.

HILE GREAT STRIDES HAVE BEEN MADE IN the fight against HIV/AIDS, the Kingdom of eSwatini (formerly Swaziland) still has one of the highest rates of HIV/AIDS in the world. According to the World Health Organization, the HIV prevalence rate among pregnant women is currently estimated to be 43% and nearly a third (27%) of adults over 15 years old are living with HIV/AIDS.

Project Last Mile is a partnership between governments, donors and Coca-Cola to share the Coca-Cola system's experience in route-to-market and marketing to ensure the availability of life-saving medicines and access to health services takes place all the way to the 'last mile' and most vulnerable people.

In 2017, Project Last Mile initiated a partnership with the eSwatini Ministry of Health and the Global Fund to leverage The Coca-Cola Company's marketing expertise to create demand for HIV prevention, specifically among adolescent girls and young women. Project Last Mile enlisted The Coca-Cola Company's network of best-in-class creative marketing and consumer insight capabilities to conduct specialized neuroscientific research which revealed that while health education is readily available, safe spaces in which individuals can have meaningful conversations about the best treatment and prevention options are not.

Tapping into the Coca-Cola network, Project Last Mile worked with the Health Promotion Unit and its partners to create an innovative campaign to encourage healthy behaviours and improve health outcomes around HIV/AIDS.

Project Last Mile launched Girl Champ in November 2018. Girl Champ uses exercise and fitness (particularly 'boxercise') as a way to start conversations about health and well-being with young girls and women.

"What Girl Champ does is let us empower the girl. Even though the crux of the matter for us is behaviour change in terms of sexual and reproductive health (SRH), we decided to look at the girl holistically. Holistically, in the sense that you look at life skills, health and fitness and then you get into SRH," says Khabonina Mabuza, Project Last Mile's Country Coordinator for the Kingdom of eSwatini.

Project Last Mile took the concept of Girl Champ into the communities, inviting young girls through their schools and community influencers to come to the clinics with the goal of making healthcare spaces more welcoming, at the same time, engaging with frontline healthcare workers trained to reinforce messaging

and enable safe consultations to link girls to appropriate health services and support.

"With Project Last Mile Girl Champ, the learners want to learn. They come back from the sessions all excited, wanting to tell me what happened there. They've opened up, telling their parents they want to go to the clinic at any time; they don't mind, it's no longer taboo," explains Zanele Ndzinia, a Career Guidance Teacher at St Andrews Primary School in Malkerns.

Globally, nearly 1,000 girls and young women are infected with HIV every day. Young girls are the most vulnerable group in any society and therefore suffer the most – girls aged 15 to 25 are five times more likely to be living with HIV than boys their age. Thanks to Project Last Mile's Girl Champ events, more than 2,000 girls have registered for health services.

"In the last five years, we've reduced the incidence of HIV by over 50%..." says Rejoice Nkambule, the Deputy Director for Health Services at the Ministry of Health in eSwatini.

"When we got the opportunity of Project Last Mile and knowing that there is the partnership with Coca-Cola, we saw it as an opportunity because Coca-Cola is a well-marketed brand, you find it everywhere. If we are able to learn from the principles that are used to market Coca-Cola and attract young people and anyone to buy Coca-Cola, we can transfer those principles into health for young people."

Leveraging and adapting strategic marketing models from The Coca-Cola Company to improve the effectiveness of health communication campaigns, Project Last Mile's Girl Champ movement is enabling adolescent and young girls to become informed and empowered to consider their future and protect their health.

– By Tiana Cline



Good For The Environment, Good For Business

The Coca-Cola Company's World Without Waste program is an environmental initiative committed to tackling the packaging crisis by deploying the circular economy and creating a collect-and-recycle market for which there is increasing demand.

environmental issues facing our planet. An estimated 12.7 million tonnes of plastic end up in our oceans each year which is why it should be no shock that the Ellen MacArthur Foundation stated that there could be more plastic than fish in our oceans (by weight) by 2050, in a business-as-usual scenario. Packaging like bottles, cans, and other containers which ends up in the environment, with no viable end-of-life solution, only adds to this waste problem and as the world's biggest beverage company, The Coca-Cola Company is sparing no effort to help resolve it.

The Coca-Cola Company's World Without Waste program is an ambitious environmental initiative launched in 2018 with the goal of collecting the equivalent of every bottle or can the company sells globally by 2030.

"World Without Waste is a clear commitment that The Coca-Cola Company has made globally. In each country, we have committed to making 100% of our packaging recyclable by 2025, and 50% recycled content in our bottles and cans by 2025. And by 2030, to achieve 100% collect and recycle in all of our packaging," explains Luis Avellar, Coca-Cola: General Manager Southern Africa Franchise. "It is a huge challenge but it is a commitment and we will have to get there. We believe across Africa and in South Africa, specifically, with the PETCO model which supports activities along the waste PET value chain in the transition to a more circular economy, including informal collectors and the formal recycling industry, that we will get there."

For decades, The Coca-Cola Company has sought to operate sustainably and in an environmentally-responsible way. The first goal was to make packaging recyclable, with a follow-up goal to ensure packages actually are collected and recycled. To date, 88% of The Coca-Cola Company's consumer packaging is recyclable — with a goal of 100% by 2025; 59% of the bottles and cans The Coca-Cola Company introduced into the marketplace in 2017 were refilled, collected, or recycled.

"We are striving to create a closed loop, so that old packaging can become new packaging. Whenever we sell an aluminium can or plastic bottle, we want to collect one back and make sure it has a second life as a new container or other useful item. Though we have made good progress, we are just getting started," states The Coca-Cola Company 2019 World Without Waste Report.



To achieve more sustainable end-to-end recycling, what is manufactured in a market must also be collected and recycled in that market. In 1998, the industry in South Africa organized themselves to start looking for solutions for PET (polyethylene terephthalate) plastic beverage bottles. They soon recognized that it was strategically good for business to find a solution for their products after they had served a useful life.

"This took about five years. The industry worked on a model that could work because you can't just collect material, you have to process it into an end-use that has an established market for which there is a demand. From the end of 2005, all of our members elected to pay a voluntary extended producer responsibility fee on every tonne of raw material and preforms that they purchase, both locally produced and imported. Companies who purchase PET resin (both virgin and recycled) or preforms/sheeting, pay the EPR fee to PETCO on a rand/ tonne basis. This model presents the lowest risk to all stakeholders, negates the need for PET EPR funding becoming a drain on the national fiscus, and is the most cost-efficient solution for society. PETCO uses this funding to facilitate and support the recycling of the collected PET material together with its recycling partners," says Cheri Scholtz, the Chief Executive of PETCO (the South African PET Recycling Company). PETCO represents (on a volume basis) about 80% of the PET beverage industry in South Africa.

"This is a real indication of awareness and commitment. Some of the brands that still are at PETCO and that sit on the board include organizations like The Coca-Cola Company who have played a real

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We are striving to create a closed loop, so that old packaging can become new packaging. Whenever we sell an aluminium can or plastic bottle, we want to collect one back and make sure it has a second life as a new container or other useful item.

- The Coca-Cola Company 2019 World Without Waste Report

leadership role since the beginning," she adds. To date, PETCO has trained thousands of entrepreneurs and supported hundreds of SMMEs with personal protective equipment, scales, cages, trailers and baling machines. In the South African context, job creation and small business support is a critical deliverable.

"We further support those businesses as they grow. We may start by simply training people, teaching them how to identify PET and sort it from other plastics. When they start doing that and start growing, we may go back and assist them with protective clothing or trolleys and as they get even bigger, we assist with a baling machine because it is not cost-effective to transport loose bottles from one end of the country to another," says Scholtz, who adds that there are approximately 90,000 people who earn a living collecting PET every year.

According to Stats SA, South Africa's informal recyclers – the 'wastepreneurs' – collect nearly 90% of used packaging and paper that are recycled, saving municipalities up to R750 million a year in potential landfill costs.

"With Covid-19, we're working with PETCO to support these waste-pickers who haven't been able to operate over the last two months and to provide them with extra PPE, extra funding, and to get the recycling value chain back up and running," explains Camilla

Osborne, Head of Communications, Coca-Cola Southern & East Africa.

Today, South Africa has one of the higher audited PET bottle recycling rates in the world. PETCO, along with its members, grew purchases of bottles for recycling from 9,800 tonnes in 2005 to 95,879 tonnes in 2019; this corresponds to bottle recycling rates of 16% and 62% respectively. From an environmental perspective, 594,448 cubic meters of landfill space and 144,000 tonnes of carbon emissions were saved through PET bottle recycling in 2019 and 2.2 billion bottles were recycled, or 6 million bottles every day.

From one recycler in 2005 to six recyclers in 2019, PETCO has supported the growth of the recycling industry, resulting in approximately R1 billion of infrastructure investment in PET recycling. Over the past 15 years, since PETCO's establishment, the local beneficiation of post-consumer bottles has grown significantly and is a valuable driver of job creation.

In 2018, The Coca-Cola Company successfully launched the same approach in Kenya, and is working to do so in Ethiopia and Tanzania as well.

"We believe that the PETCO model has clearly demonstrated the effectiveness of industry-led Extended Producer Responsibility, not only in terms of increasing collection but also in stimulating a local recycling industry. As Coca-Cola, we will continue to support Producer Responsibility Organizations like PETCO across both the region and the range of materials we use in our packaging," says David Drew, Head of Sustainability, Packaging and Climate Change, Coca-Cola Southern and East Africa.

Today, South Africa's PET beverage bottle recycling rate is at 62%, and the country and Coca-Cola remain committed to the 100% recycling journey.

– By Tiana Cline



SUSTAINABLE PACKAGING: SPRITE'S REFRESHED LOOK

Did you know that clear PET is more valuable than green PET? Clear PET can be made into a wide range of new products such as pillow and duvet inners, as well as new bottles.

Coca-Cola in South Africa currently uses an average of 8% recycled content in its plastic bottles but to meet its 2030 recycled content target, the company needs more clear bottles to be collected and recycled. Enter a new, cutthrough Sprite look in clear, easier-to-recycle bottles. "We're journeying to a World Without Waste and moving to clear Sprite packs, which

means more of our plastic can be collected, recycled and re-used to make new bottles," says Stephan Czypionka, Marketing Director for Coca-Cola Southern & East Africa.

The new cut-through Sprite look includes a refreshed icon of the brand's bold and iconic Sprite 'spark'. To help consumers easily identify their favorite Sprite variant, each bottle will have a distinct label and different color closure.

"Moving to clear PET will also help in maximizing the use of recycled and renewable materials and minimize the use of virgin materials," explains Czypionka. "We all have a role to play in protecting our planet... the future is clear."



PFIZER'S COVID

MOON

BY NATHAN VARDI

Albert Bourla has boldly predicted his company might find and distribute a vaccine by this fall. The first look inside a \$1 billion bet that could change the world.

SHOT

N THE MIDDLE OF MARCH, PFIZER CHIEF
Albert Bourla beamed into a Webex video call with
the leaders of the American pharmaceutical giant's
vaccine research and manufacturing groups.

The two teams had worked late into the night or

The two teams had worked late into the night on a robust development plan for Pfizer's experimental Covid-19 vaccine and told Bourla that they aimed to make it available lightning-fast. It could be ready sometime in 2021.

"Not good enough," Bourla said. The faces of the researchers tensed up, and conscious of the Herculean effort that had taken place, Bourla made sure to thank them. But he also kept pushing. He asked if people on the call thought the virus might come back in the fall, and what they expected would happen if a vaccine were not available when a new flu season hit at the same time, an issue the federal Centers for Disease Control raised weeks later.

"Think in different terms," Bourla told them. "Think you have an open checkbook, you don't need to worry about such things. Think that we will do things in parallel, not sequential. Think you need to build manufacturing of a vaccine before you know what's working. If it doesn't, let me worry about it and we will write it off and throw it out."



Says Mikael Dolsten, Pfizer's chief scientific officer: "He challenged the team to aim for a moon shot-like goal — to have millions of doses of vaccine in the hands of vulnerable populations before the end of the year."

On the first Monday of May, Pfizer dosed the initial batch of healthy American volunteers in Baltimore with an experimental Covid-19 vaccine it developed with Germany's Bio NTech. Bourla was informed immediately. The following day, in an interview from his home in suburban Scarsdale, New York, he pointed out that it normally takes years to accomplish what Pfizer had just done in weeks. "How fast we moved is not something you could expect from the big, powerful

pharma," he said. "This is speed that you would envy in an entrepreneurial founder-based biotech."

A Greek veterinarian who worked his way up the Pfizer corporate ladder for 25 years before becoming CEO in 2019, Bourla says nothing in his career could have prepared him for this moment. But he does believe the massive corporate transformation he has led — steering a behemoth conglomerate (2019 sales: \$51.8 billion) deeper into the high-risk, high-reward game of developing new patented medicines and away from generic drugs and consumer products like Advil and Chapstick — has prepared Pfizer.

For Bourla, 58, the last four months have been a rollercoaster, an unending series of setbacks and victories. Pfizer is not alone in the race. Most of the world's biggest pharmaceutical companies, including Johnson & Johnson, Sanofi, AstraZeneca and Roche, are throwing everything they can at Covid-19.

Some experts feel Bourla's timeline — a viable vaccine in a matter of a few months — is simply unrealistic. Undeterred, Bourla has tasked hundreds of researchers to scour Pfizer's trove of experimental and existing medicines to look for potential therapies. Early on, he openly authorized having discussions and sharing proprietary information with rival firms, moves unheard of in the secretive world of big pharma. Bourla has made Pfizer's manufacturing capabilities available to small biotech concerns and is in talks as well to make large quantities of other companies' Covid-19 drug candidates.

Pfizer's most prominent effort is its work with Mainz, Germany-based BioNTech, an innovative \$120 million (2019 sales) outfit that is mostly known for making cancer medications. The resulting experimental Covid-19 vaccine works with messenger RNA, a bleeding-edge technology that has never resulted in a successful treatment. Pfizer is hoping to get emergency-use authorization from the U.S. government for the vaccine by October. Its unique strategy is to rapidly pit four different mRNA vaccine candidates

Shot of Hope

Volunteers receive injections of Pfizer's experimental Covid-19 vaccine in early May at the University of Maryland School of Medicine in Baltimore. Pfizer is running tests in three other U.S. cities: New York, Cincinnati and Rochester, New York.

against one another and double down on the most likely winner.

In preparation, the company is shifting production at four manufacturing plants to make 20 million vaccine doses by the end of the year and hundreds of millions more in 2021. Bourla says Pfizer is willing to spend \$1 billion in 2020 to develop and manufacture the vaccine before they know if it will work: "Speed is of paramount importance."

While the vaccine effort is getting most of the public's attention, Pfizer is also rushing to start a clinical trial this summer for a new antiviral drug to treat Covid-19. Additionally, it's involved in a human study that seeks to repurpose Pfizer's big arthritis drug, Xeljanz, for laterstage Covid-19 patients.

"Being the CEO of a pharma company that can make a difference or not in a crisis like this is a very heavy weight," Bourla says. "Even the way my daughter or son ask me, 'Do you have something or not?' Every person who knows me does the same. You feel if you get it right, you can save the world. And if you don't get it right, you will not."

In January, Uğur Şahin, the brilliant immunologist who founded BioNTech, read an article about Covid-19 in *The Lancet*. Şahin built BioNTech to hack human cells to go after diseases, particularly cancer, and he thought similar tech might work against the coronavirus. Soon after, Şahin spoke to Thomas Strüngmann, the German pharma billionaire who for years has backed Şahin and his wife, immunologist



Özlem Türeci, in their ventures. "He said, 'This is a big disaster.' He said the schools will be closed, that this will be a pandemic," Strüngmann says, referring to Şahin. "He switched most of his team to the vaccine."

In February, Şahin (who is also now a billionaire, as BioNTech's stock has soared) called up Kathrin Jansen, who heads vaccine research and development for Pfizer. Şahin told Jansen BioNTech had come up with vaccine candidates for Covid-19 and asked if Pfizer would be interested in working with him. "Uğur, you are asking?" Jansen replied. "Of course we are interested."

Over the last few years, scientists have become intrigued by the idea of using messenger RNA, the genetic molecule that gives cells protein-making instructions, to develop medicines for cancer, heart disease and even infectious viruses by transforming human cells into drug factories. Because SARS-CoV-2, as the coronavirus is formally known, is an RNA virus, researchers like Şahin focused on the idea of giving mRNA the cellular machinery to make proteins that would create virus-protecting antibodies.

An mRNA vaccine has huge advantages over a traditional one. Because it can be made directly from the genetic code of the virus, it can be invented and entered into clinical trials in a matter of weeks, rather than months or years. But there's a big downside: No one has ever successfully made one.

BioNTech is not alone in pursuing an mRNA vaccine. Moderna Therapeutics, a biotech in Cambridge, Massachusetts, also got going in January and has launched a big human trial for its mRNA vaccine, backed by \$483 million from the federal government. Moderna is likewise aiming to produce millions of doses per month by the end of the year.

Pfizer was already comfortable with BioNTech. Two years ago, the two companies inked a \$425 million deal to develop an mRNA flu vaccine. Pfizer was intrigued by the potential of an mRNA approach to short-circuit the process of developing a vaccine for a

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A billion dollars is not going to break us. And I don't plan to lose it. I plan to make sure we use this product.

new strain of the flu every year. That same flexibility and speed appealed to Bourla when it came to working with a partner on a potential vaccine for Covid-19.

On March 16, Bourla convened Pfizer's top executives and informed them that return on investment would not play a role in the company's Covid-19 work. "This is not business as usual," Bourla told them. "Financial returns should not drive any decisions."

Pfizer signed a letter of intent with BioNTech the next day. The contract they finalized in April makes no mention of commercialization. Pfizer is bringing its enormous manufacturing, regulatory and research capabilities to the effort. BioNTech is bringing the basic science.

At the same time, Bourla made the decision to spend \$1 billion on the project, so if the vaccine works, it can be made available this autumn. Pfizer will also be on the hook to pay BioNTech an additional \$563 million if everything goes according to plan. "A billion dollars is not going to break us. And, by the way, I don't plan to lose it. I plan to make sure we use this product," Bourla says. "You never know until you see the data. So yes, we are going to lose a billion if the vaccine doesn't work."

What makes Pfizer's approach unique is that it's testing four distinctive vaccines — different mRNA platforms that are supposed to induce a safe immune response. The complex trial will start by testing different dosing levels of the four vaccines in 360 U.S. volunteers and 200 in Germany, eventually expanding to around 8,000 participants.

The U.S. trial was designed to evolve so the company could quickly stop testing any one of the vaccines if immunogenicity data show it is not producing enough antibodies to confer virus protection. The companies are making adjustments on the fly. BioNTech recently realized one of the vaccine candidates should be dosed at a lower level to be safe — an early fling of a monkey wrench into the plans.

There is considerable scepticism among experts that Pfizer's goal of providing millions of doses to vulnerable

populations by the fall is possible. Drew Weissmann, whose University of Pennsylvania laboratory has worked with BioNTech on mRNA vaccines for infectious diseases, recently told Forbes it is simply not known if an mRNA vaccine can prevent infectious disease.

Jansen, Pfizer's vaccine research chief, expects that Pfizer and BioNTech will have a better idea around the beginning of July as to which of the four vaccine candidates is the most promising and whether their hyperaccelerated timeframe is feasible. The company will likely move just one or two of the most promising vaccines to more advanced trials.

"It's not easy. As a matter of fact, it has never been done before — I can't give you a probability," Jansen says. "An unprecedented crisis, such as the ongoing pandemic, requires unprecedented action. Albert was the first to see that and act on it, and to provide the support and the environment for us to think and act boldly."

When Albert Bourla started his run at the top of Pfizer in January 2019, he removed the bulky brown table from the CEO's conference room and did not replace it, rearranged the chairs in a circle and put up photographs of patients on the wall. The idea was to promote open discussion and remind people about the real purpose of a pharmaceutical company. Soon after, other Pfizer employees began to put pictures on their desks of patients they know or love.

The unorthodox way Bourla took to the pinnacle of corporate power started in Greece's second-biggest city, Thessaloniki, a northern port city on the Aegean Sea. He grew up middle-class — his father and uncle owned a liquor store — as part of a tiny Jewish minority that survived the German occupation and the Holocaust.



First Time
Uğur Şahin, the Turkish-born CEO of BioNTech.
The German outfit was founded 12 years ago, but despite considerable promise it has yet to bring an approved drug to market.



Making It

Pfizer is stockpiling
inventory of its
existing vaccines
and injectable
drugs to free up
manufacturing
capacity to make a
Covid-19 vaccine later
this year.

A love of animals and science drove Bourla to become a veterinarian. At Thessaloniki's Aristotle University, he was known for playing the guitar and singing, and during the summers worked as a European tour guide. He joined Pfizer's Greece office in 1993, working in its animal-health division, beginning an ascent that saw him move his family to eight cities in five countries, including Poland and Belgium.

By 2014, Bourla was a high-level executive at Pfizer's Manhattan headquarters on 42nd Street, where, among other things, he ran Pfizer's vaccine and cancer divisions. He brought a Mediterranean flair to the buttoned-up conglomerate. His group meetings were boisterous, echoing through the otherwise largely silent corridors. He forced company units to express their metrics in terms of how many patients they were helping, not merely in terms of dollars and cents.

Ian Read, Pfizer's Scottish-born CEO at the time, had reversed the company's fortunes on Wall Street, where its stock had been badly underperforming, by repurchasing lots of shares and divesting businesses that sold baby formula and animal medicines. Less visibly, Read reinvigorated Pfizer's drug pipeline in its core vaccine business and empowered Pfizer's researchers to develop targeted therapies, particularly for cancer, as some of its mass-marketed drugs, like the cholesterol-lowering blockbuster Lipitor, went off-patent.

Bourla's last job before ascending to the C-suite was as head of Pfizer's innovation group. He approached the position as though he was running a life-sciences venture capital firm. He forced each of his six business units, which included oncology, vaccines and rare diseases, to compete for financing. "I was telling all of them, 'I'm your boss, I am private equity, the one who has the better ideas will get the money," he says. "A company that has the scale of Pfizer and the

mindset of a small biotech was always my dream."

"Albert has a sense of urgency, and that is coming out in the way he is marshaling the company's resources behind trying to develop a vaccine or treatment for Covid-19," says Read, his former boss. "He is a charismatic people person, energizing groups of people to get the job done."

Bourla's urgency was evident after a difficult weekend in February when he realized that Covid-19 was not going to be just a problem for China. On a call the following Monday morning, Bourla fired off instructions to Pfizer's top brass. He told the science executives to make sure the company's labs remained open, and that Pfizer needed to contribute to a medical solution to the pandemic.

"If not us, then who?" Bourla said. He instructed the manufacturing group to make a list of Pfizer's drugs—including those that treat heart failure and opportunistic bacterial infections — that would be in high demand in a pandemic and make sure they wouldn't be hampered by production bottlenecks. He then officially informed the board that he was pivoting the company toward Covid-19.



This is not business as usual... Financial returns should not drive any decisions.

"

Albert laid out early why it was so important to put up the enormous resources of Pfizer without an eye toward the business bottom line.

One day in the midst of this retooling, Pfizer director Scott Gottlieb, who used to run the FDA, left the company's Manhattan headquarters, and within hours his fears were coming to pass: Reports were emerging from California indicating community spread in America. That evening Gottlieb posted a Twitter thread: A long fight could be ahead, one requiring shared sacrifice, he said — but partly because of Bourla's efforts at Pfizer, he could also say that development of vaccines and therapeutics was already underway.

"Albert laid out early why it was so important to put up the enormous resources of Pfizer without an eye toward the business bottom line," Gottlieb says. "Coming up with a vaccine could change the course of human history. That is literally what's at stake, and big companies have the ability to scale up manufacturing and run big trials in a way not available to small product developers."

In the middle of March, Bourla decided to publicly release Pfizer's plan to share data from its Covid-19 research with rival pharmaceutical companies. He promised to use any excess manufacturing capacity and even shift production at Pfizer's facilities away from its own products to make Covid-19 treatments from other companies. "You know the saying," Bourla says. "Beware [of] what you wish for."

Since then, Pfizer has heard from 340 companies. It has already given technical support to some of them and is on the brink of signing large manufacturing agreements with others. It is also in discussions with additional firms that need financing for their own Covid-19 therapies.

"Will my kids go to school next fall?" Bourla wonders. "I'm also part of society. You cannot stay silent."

At a video meeting of Pfizer's board of directors in late April, Bourla was asked what would happen if multiple vaccine makers were successful. That would be the best possible outcome, he replied, because enormous amounts of vaccine could be quickly produced.

Beyond the holy grail of a vaccine, Pfizer is also trying to come up with therapeutic solutions. The researchers tasked with combing through Pfizer's molecular database became intrigued by several of its antiviral compounds that might attack the virus by stopping it from reproducing. After Pfizer got the DNA sequence of the coronavirus in January, researchers figured out which could work best.

Conducting preclinical work on the selected compounds,

however, was difficult. Pfizer had trouble finding a lab that could perform the proper assays. The company had scaled down its antiviral research a decade ago and no longer owned a suitable biosafety lab to work with the live virus. At one point, Bourla feared the lack of a lab would delay the clinical-trial process. But a separate government medical agency helped Pfizer find a good one in the Netherlands.

There have been "multiple moments of bad news coming to spoil the good news you had three hours earlier," Bourla says.

Pfizer's laboratory work has since shown one of its protease inhibitors, initially developed to battle SARS, to exhibit antiviral activity against SARS-CoV-2. Pfizer is now aiming to start a human trial for that antiviral, which is administered intravenously, by the end of the summer.

Another Pfizer drug getting attention is Xeljanz, a rheumatoid arthritis pill generating \$2.2 billion annually. It is seen as a potential way to tamp down the massive immune response to Covid-19 that overwhelms some infected patients.

Pfizer is supporting a Xeljanz trial in Italian Covid-19 patients, as well as another U.S. trial that will test a different arthritis medicine, an experimental drug that targets the Irak-4 protein, against the virus.

While all this is going on, of course, Bourla still needs to run the rest of Pfizer. He recently planned a symbolic visit to a Pfizer plant — none has closed—but after making the arrangements, he was informed that he would not be allowed to enter because he was not deemed essential.

"I don't know if I was ever prepared for something like this," Bourla says. "But you feel that you need to suck it up and rise to the occasion because that's what you have to do." ®



"Quick Kill"

That's how Kathrin Jansen, Pfizer's vaccineresearch chief, describes its approach to its four vaccine candidates: Terminate any vaccine that's not showing it can produce sufficient neutralizing antibodies.



She has had a life of struggle and adventure, and even before being known as the mother of South African-born tech billionaire Elon Musk, was a star sashaying down the runway at the New York Fashion Week at the age of 67, rewriting the rules of the modeling industry. Maye Musk speaks to us from her home in Los Angeles about her new memoir, A Woman Makes A Plan, released by Jonathan Ball Publishers, and how Elon was always her 'genius boy' and is now set on exploring Mars.

INTERVIEWED BY RENUKA METHIL

You are 72 years old and a grandmother to 12 grandkids.
How do you manage to look great and also be a model, dietician, author and entrepreneur?

Women can do anything and everything... I have to eat very well to maintain a healthy weight and have a lot of energy. I have also never smoked, which is great and I wear a hat in the sun and sunscreen. You need to look after yourself and stay healthy and then, of course, the world is the limit. And then there's Mars...

You grew up in Pretoria (South Africa) and in your book, recount your trips traveling with your parents across the Kalahari Desert every winter. Your family motto was 'live dangerously — carefully'. Have you always been adventure-seekers? With my parents coming from Canada, from a small town, to South Africa, they just wanted to explore

Africa and the world in a single

engine plane. They did a lot of that and then they took all five children to the Kalahari Desert... with a compass and we would map it out and we would map the hills... [when] all my friends went to the beach... but it's so weird my parents were so adventurous, it was wonderful!

Your older son Elon Musk, as the founder of Tesla, makes electric cars and launches rockets into space. Your second son Kimbal is a food entrepreneur and your daughter Tosca a filmmaker. What was it like raising three successful kids as a struggling single mother? How did you navigate great sadness and stress along the way? Funny enough, when I told my children my book agent wants me to write about my life and the lessons I've learned and they said, 'you've got to bring your struggles into vour book', and I said, 'oh vou know, I never complain', so they said, 'no, people need to know what you've been through'. So I put the struggles in and then when I read it with my editor, I said 'oh, I have got to take some of these chapters out', and she said, 'no, women

will relate to them', and that's why my struggles are in there.

If you are in a bad situation, you just have to get out; you have to get out quicker than I did. You have to find a way and share your problem with your family and friends. Interestingly, my twin sister and my two brothers had no idea what I was going through. I never came across as struggling as I never complained. I was always happy. My point is, if you complain all the time, then you're not interesting or fun or beautiful because you are just miserable. That's why I never told anyone what I had been through, but nowadays, if you need help, you need to tell people.

What is your advice for overcoming stress and depression?

I never went through depression. Depression means you can't get up in the morning. I had to get up, get the kids to school and be at work at 7.30AM. So I didn't have depression but I had a lot of sadness and rightly so, because I was scared and had to feed the kids. And then my ex-husband, after my divorce for 11 years, had me in lawsuits. That was exhausting and you live in constant fear. When it comes to depression, because I'm a dietician, and I've counseled patients for 45 years, and many of them were depressed and some had a reason, sometimes poor health, and I could help them eat better. If there is a reason for the depression, you need to talk it out. If it is because of things that have happened in the past, then I recommend they don't continually complain about their past, because it just makes them less interesting.

When it came to dating, every time I met a man, he would tell me about his miserable life and I would say, 'I feel like I'm counseling, I am getting out of here!. When they want to date someone, men also need to be fun and have some kind of interest other than their miserable lives.

You have called Elon your 'genius boy' in your book. He got his first computer at 12, and learned to use it and wrote a computer program, BLASTAR. He published it at the age of 13. How did you see that interest in technology in him bloom?

I told people when he was three that he was a genius and people were like, 'oh, you are such a mother', because all mothers think like that. Then, I would say, 'no, really'. He would read the encyclopaedia and remember everything in there, so he really was our encyclopaedia. I mean I can read a book and I would forget it soon afterwards but he does not forget those things.

It was when he was 12 [that] he showed me his computer program when I was teaching modeling to university students. I showed it to some of the computer students and they said, 'oh, he knows all the short cuts, it looks great'. So, I told him he had to submit the program to a magazine and he did. I don't think they knew that he was only 13, and he got R500 for it; how cool is that?

What does it take to raise a billionaire?

I did not raise a billionaire – [Elon] was sleeping on the floor on a mattress. And that wasn't his aim [to become a billionaire]. His aim

is to save the planet and he also loves the thought of going to Mars. I raised all three of my kids the same way my parents raised me, to be independent, to make your own choices and be responsible for them, and also to take on work that will benefit other people. For example, Tosca has a platform called Passionflix and she takes best-selling romance novels and makes them into movies. In these movies, the women are paid as much as the men and they are strong, and confident and successful. They aren't beaten up, violated and abused and there are always happy endings. It makes me feel good she is making movies that make people happy.

With Kimbal, besides his farm-to-table restaurants, which helps the farmers, he does vegetable gardens in underserved schools. He has built 650 vegetable gardens in schools; he wanted to do 1,000 by the end of the year, but of course, everything's got delayed with the lockdown. The children get so excited to plant seeds and water them and pick them out of the ground and prepare them and eat them. I mean to get kids excited about vegetables; well, it makes a dietician like me very happy.

Your son Elon's pioneering work is to one day inhabit Mars. Did you always see that interest in him for space? Do you share that with him?

I get very excited every step of the way. We all do. Kimbal and Tosca and I go to the main launches, we can't go to all the launches, as Elon has launched, how many now... 50 rockets? I'm not sure. I lose track. But we go to the main ones, and we are anxious beforehand and excited afterwards and we are very proud of him and support him with all this. He just feels that we should be inter-planetary, starting with Mars. Mars seems to be the most friendly [planet], and that is what he would like to explore.

What do you call Elon Musk's youngest son (whose name is X Æ A-12)?

I call him 'X'. We are all still in quarantine so we are Covid-free. We see each other when we can but not as often we used to.

What next for Maye Musk?

I am just getting started and once the airports open up and will accept Americans into other countries, my book launch will go into all the major countries, hopefully South Africa too, and then I can give talks in [all these] different countries. The goal of my book is to inspire people to have happier lives.

What is the strength of South Africa's women according to you?

I have always found South African women to be strong, confident and fun. I miss their sense of humor. They just need to support each other, and the men need to support women so they can advance, because when women advance, the country does better.

- For the full interview, visit forbesafrica.com

Pulling The Plug On The Live Party

Famed for its hip and happening nightlife, Nigeria's bars and entertainment venues have fallen silent, and its DJs are now pumping up the volume online.

BY PEACE HYDE

changed for Obi Ajuonuma. The noise of the nightclub had been music to his ears. They were his echoes of success, and now, so suddenly, the venues have all gone quiet, and the silence is getting louder.

As one of Nigeria's top-rated DJs, who had at one time set a world record for a 240-hour marathon on the decks, he is now faced with an uncertain future, one in which Nigeria's bars and entertainment venues may never come alive as they used to.

Covid-19 has almost decimated the F&B industry, and with that, a slew of jobs that depended on it.

Ajuonuma, who has been a DJ for the past 16 years since graduating with a degree in broadcast media and entertainment from Westfield State University in Massachusetts, had relocated to Nigeria in 2012 for his career. This was after his father passed away in the Dana Air crash in Nigeria that claimed the lives of 159 people.

"It was a decisive time for me because I was struggling between being a DJ or doing what I went to school for, which was broadcast media and journalism. But I decided to stick to DJing because it made more money and gave me more control of my schedule," says Ajuonuma.

That turned out to be the best decision of his life. Since relocating, Ajuonuma, who famously goes by the moniker 'DJ Obi', has become one of the most sought-after DJs in the Nigerian entertainment scene, with a handful of brand endorsements to boot.

He is a resident DJ in the most exclusive spots in Lagos as well as the go-to name for upscale weddings and birthday parties.

Everything was going swimmingly well until the Covid-19 pandemic hit.

The marauding virus has been disrupting lives and businesses in Nigeria since the country first introduced measures to

mitigate its spread on March 30, with a total lockdown of the commercial capital, Lagos, and neighboring Ogun and Abuja. The total number of Covid-19 cases is rising, forcing many small businesses to reimagine new ways of staying afloat.

For many, it has meant taking a significant drop in payment for their services.

"I think my industry is one of the obvious sectors hit because human beings are meant to socialize and, in my industry, profits are made when human beings come together to party and enjoy themselves and put together events. That is one of the first things that shut down in terms of no social gatherings, no meetings, and as DJs, this is how we make our money, so if we can't have people coming together, then we can't make a living," says Ajuonuma.

The crisis has pushed entrepreneurs like him to be creative by going digital.

"Thanks to platforms like Instagram Live and Facebook, YouTube and Twitter Live, we have had to move the party online. So, we are taking the music to the people. So, if you can't come to me, I will come to you," he says.

Luckily, platforms like Cash App, PayPal and Venmo have made it easy for DJs to receive tips, which has become the new form of payment for playing sets online. For those like Ajuonuma with an established reputation, another revenue source is brand endorsements. Cîroc for example was one of the first sponsors of his live sessions.

"For drinks brands, it's



Human beings are meant to socialize and, in my industry, profits are made when human beings come together to party and enjoy themselves and put together events.

– DJ Obi



What we have done is explore online connecting opportunities. We have moved to a retainership model with a number of clients where we do specific programs online.

- Rex Idaminabo

difficult to translate advertising into products being purchased because now, people are not buying 20 bottles in the club because they are at home and they have priorities now because the world has changed."

On the plus side, Ajuonuma increased his Instagram following from 59,000 to about 70,000 in the two months since the lockdown. And he is not the only one.

"There are DJs who have boosted their followers from 48,000 to 1.2 million on Instagram. We have also taken the whole Instagram experience to TV," he says.

Zoom has also provided a new revenue stream for Ajuonuma.

"I have done like three Zoom birthday parties... So now, I can plug into Zoom and have a party with people all over the world."

Other entrepreneurs within the events space have also had to rethink their value proposition. Rex Idaminabo is the founder of Achievers Media, which creates high-end events and networking opportunities for a specially-curated clientele. The ban on major gatherings has reduced sponsorship moneys, which used to be the main source of income for his business.

"What we have done is explore online connecting opportunities. We have moved to a retainership model with a number of clients where we do specific programs online. We have also organized global virtual conferences where clients can also network with various leaders across the world," says Idaminabo.

The growing impact of the threat to economic livelihoods is also being felt in other areas of the economy in Nigeria. At the former end of the F&B spectrum, is the food business, and with Covid-19 set to radically aggravate food insecurity, the issues are at many levels.

In spite of Nigeria's dependence on oil, agriculture remains an important mainstay for the economy, providing employment for millions, especially in the informal sector. And higher up in the value chain of the food business is the hotel and restaurant industry, confounded with an unprecedented dip in profits and job losses for the millions it employs.

For now, the restaurants are finding it difficult to put food on the table. \blacksquare

HOW THE PANDEMIC

S

In South Africa, the 'Big Three' – rugby, cricket and soccer – face plummeting revenues in the wake of no live sport, while minor codes are under even greater threat as crucial sponsorship money dries up.

BY NICK SAID

PLAYING OUT IN SPORT

of which has never been seen before and one that has the potential to change the game forever as the Covid-19 pandemic threatens the brittle fabric that has kept professionalism alive in the country.

Rugby, cricket and soccer all face plummeting revenues in the wake of no live sport, while minor codes are under even greater threat as crucial sponsorship money dries up.

The 'Big Three' all rely heavily on broadcast revenue, and for rugby and soccer, the inability to stage live sport in the first few months of the lockdown has put that relationship under threat. As has the worsening economic crisis in the country, which could see millions more people out of jobs and cancelling their subscriptions to pay channel *SuperSport* in what will be the longer-term effect of the pandemic.

Tough economic times do not bode well for sports, with the corporate paymasters loathe to be seen to be pumping money into sponsorship while at the same time laying off workers.

The immediate threat to all sports is to keep paying the players and staff, and across the board, there have been salary cuts that suggest the days of largesse are over, for now, and possibly, the foreseeable future.

South Africa's Premier Soccer League (PSL) faces the potential for collapse as we know it, with clubs already cutting player salaries, laying off non-playing staff and facing a burst to the bubble of what is seen by many as the richest and best-equipped league in Africa.

Absa announced a premature end to their lucrative deal as headline sponsors of the league, worth some R140 million (\$8.3 million) per season, while stalwart clubs such as Bidvest Wits, with a rich 99-year history, have been sold as owners reconsider their appetitive for the sport.

"Football all over the world is a business like any other," Cape Town City owner John Comitis tells FORBES AFRICA. "It has to be treated as such and that means in tough economic times, you have to look at ways of cutting costs.

"But as a club, we will do everything possible to limit the damage. A lot of that will be dependent on how quickly we can re-start the season, because we need to fulfil our contractual obligations to our sponsors and the broadcaster.

"That is the major source of income and without that, it is inevitable that the effect will trickle down to staff and the players.

"But even if you cut player salaries, the cost of running a club remains high. It is a very difficult situation and some [clubs] will handle it better than others."

Fellow top-flight side AmaZulu confirmed they could not pay full salaries as early as the end of April, though they were guarded on the size of the cuts, saying in a letter to players and staff, "even though the club receives the [R2 million] PSL grant and has Spar as a sponsor, it still relies on other income streams and significant contribution from the owners of the club whose businesses have been severely affected by Covid-19".

In rugby, some of the country's top players will lose up to 43% of their monthly earnings up to the end of 2020 after South African Rugby announced plans to cut its budget by R1.2 billion (\$71.5 million) for the year.

This would be achieved through a mixture of interventions, including cancelling junior competitions, and limiting other operations such as training camps, coaching courses and non-essential work.

But players will also feel the brunt, with a sliding scale used to determine how much they will lose on their monthly wage, which according to reports, is on average around R50,000 (\$2,980) per month across the board, though higher earners can collect five times that amount.

The cuts, which amount to 25% of total remuneration across the industry, are not just for players, but coaching staff, administrators and office workers as well. Those earning less than R20,000 (\$1,192) per month will not be affected.

"It was a complex process to find alignment with a number of entities representing 1,396 people in the South African rugby industry," SA Rugby CEO Jurie Roux says.

"The group identified our collective areas of financial risk and what savings had to be made and then identified a plan to mitigate those risks.

"It has meant salary cuts for many, but we have put together a plan that will ensure the industry will be positioned and resourced to get straight back to action just as soon as we are permitted."

Cricket has largely been shielded from the financial fallout due to the fact that the season was coming to an end just as lockdown was implemented.

It means the industry would have been dormant for a few



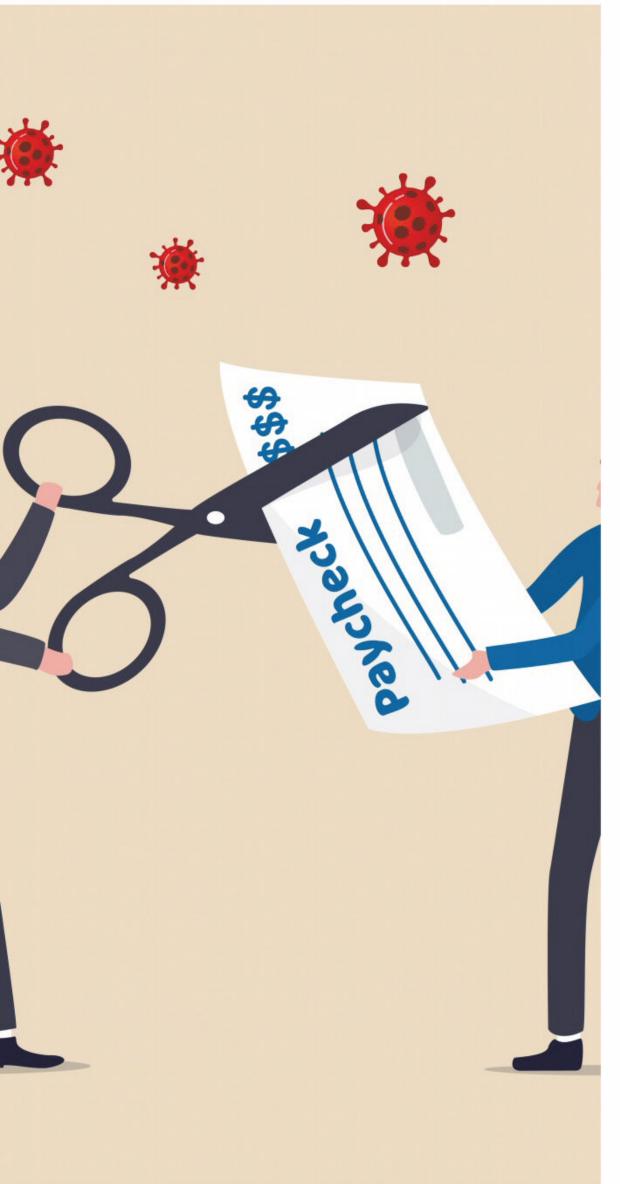
But even if you cut player salaries, the cost of running a club remains high.

– Cape Town City owner
John Comitis



The group identified our collective areas of financial risk and what savings had to be made and then identified a plan to mitigate those risks. It has meant salary cuts for many, but we have put together a plan that will ensure the industry will be positioned and resourced to get straight back to action just as soon as we are permitted.

- SA Rugby CEO Jurie Roux





In our situation, I cannot see any player getting less money this season, but going forward, I can see a situation where players might have to receive less.

– Cricket South Africa Acting CEO Jacques Faul

months in any case, and the national team players mostly idle, though a limited overs tour to Sri Lanka in June was called off.

South Africa's home summer really kicks into gear in December, by which time authorities are hopeful they will at least be able to stage matches and fulfil their contractual obligations, though a poorly-performing economy may have longer-lasting effects.

"We have budgeted for the amount [of salaries for the season]," Cricket South Africa Acting CEO Jacques Faul says. "It's a centralized system and both the national team and [domestic] franchise players are budgeted for. At this stage, we will have enough capacity to see us through the [2020/21] season.

"But in the long term, even if we cover this season, we will have to look at what the situation is going to be after that and the financial impact it has. In our situation, I cannot see any player getting less money this season, but going forward, I can see a situation where players might have to receive less."

The great uncertainty for everyone is the difficulty in predicting how the Covid-19 pandemic will play out in South Africa.

But what is clear is if salaries and jobs are to be saved, the games need to start sooner rather than later, or the money will simply dry up, and in a worst-case scenario, the likes of rugby and cricket could return to the amateur era.

Photo by Richard Bullock

IN THE LONG RUN

He ran away from his circumstances in war-torn South Sudan. Today, this refugee athlete has crossed boundaries, broken barriers and has Olympic aspirations.

BY MOTLABANA MONNAKGOTLA

EVENTY MILLION. THAT'S THE NUMBER OF refugees forcibly displaced worldwide. The size of an entire nation. People without homes in a world that is now saying 'stay home, stay safe'.

Jamal Abdelmaji Eisa Mohammed is one of them, forced to leave his home at a young age. Still in his 20s, this South Sudan-born migrant refused to confine himself within boundaries. In fact, he crossed several of them, as a full-time 'refugee athlete', eventually making it to the finish line and winning gold at world sporting events.

When he was only eight years old, he had to endure the tragedy of losing his father – who was shot and killed by the militia in his home country. "When you grow up, you have your dad and you don't need to worry about anything because someone cares about you, and [then] you lose him and life goes from good to terrible and that's how I decided to do something for my siblings because I was now the head of the family," recalls Mohammed.

In 2010, this led him to decide to leave his conflict-ridden country to seek greener pastures. However, he legally couldn't because he was underaged, but arranged to pay to have his date of birth changed.

"I saved money and changed my birth year from 1996 to 1993. I then traveled to Egypt and then Israel and slept in the park until I met a kind Sudanese person who let me move into his house."

Two years on, Mohammed had made friends in the foreign country and played football with them. One of them advised him to take to athletics because he could run behind a ball for hours.

In 2014, he joined a club, and won his very first competition.

"

I saved money and changed my birth year from 1996 to 1993. I then traveled to Egypt and then Israel and slept in the park until I met a kind Sudanese person who let me move into his house.

Today, Mohammed is a part of the Athlete Refugee Team (A.R.T), formed in early 2017 by Kenyan long-distance runner, Tegla Loroupe, for refugee track athletes competing in global IAAF (World Athletics) events and the Olympics. A.R.T is funded by On Running, IAAF, the UNHCR and Pascal Gerdsmeier, a private investor based in Monaco. A.R.T, made up of refugees from the Congo, Ethiopia, Somalia, South Sudan and Morocco, is hoping to take them to next year's Tokyo Olympic Games as medal

A 90-minute documentary titled RUN, released on June 20 (World Refugee Day), depicts the story of A.R.T from inception to the current coronavirus crisis that has stalled the sporting world. The documentary, shot over three years and across three continents, follows the athletes' "emotional journey to compete at the Olympics", and covers their lives, from "living in war-torn tribal regions to competing on the world stage". It's the story of the human spirit and how sport can change lives.

contenders.

Since 2017, Mohammed has traveled between Europe and Africa competing professionally. A top contender for the now-postponed Olympics, he continues training hard for the proposed event in 2021. He ran away from his destiny at a young age, and continues to change the course of his life. •





BY TSHILIDZI MARWALA

The writer is a professor and the Vice-Chancellor and Principal of the University of Johannesburg. He is the Deputy Chair of the Presidential Commission on the Fourth Industrial Revolution.

T WAS NOT JUST THE fragility of human life that the coronavirus revealed; it was the precarious position of Africa's healthcare systems, the inability to handle the rapid urbanization and population growth and the fundamental disconnect between states. Around the continent, as countries emerge from strict lockdowns, there is an understanding that Africa's challenges must not fall to the wayside as we combat this invisible enemy. It is easy to lose sight of the end goals in these times. It is essential to identify where Africa will be located in the post-corona world.

What then, is the postcorona world? Is this the world we envision after a vaccine or the world where the coronavirus persists? Will we adapt to 'the new normal'? In the words of Indian writer Arundhati Roy, "Historically, pandemics have forced humans to break with the past

What Then, Is The Post-Corona World?

and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next."

In an address to the African Union (AU) and the United Nations (UN) in May, Naledi Pandor, South Africa's Minister of International Relations and Cooperation, delivered a powerful speech that ended: "Timely and vigorous actions by all our leaders will not only lead to addressing the challenges of the Covid-19 pandemic but will also contribute to strengthening the foundation for lasting cooperation and solidarity among African countries, to achieve durable peace, security and development in Africa."

This, of course, must take into account the expected fallout from the coronavirus. Early estimates from the African Development Bank indicate Africa could lose between \$35 and \$100 billion just from the drop in the prices of raw material. Similarly, the World Economic Forum estimates global losses for the continent will be to the tune of \$275 billion. Amidst Africa's myriad challenges, inequality and disparity will widen. In fact, the UN expects Africa's economic growth could contract by 2.6%, which would push about 29 million more people into extreme poverty.

Africa is growing rapidly. The population is expected to increase by roughly 50%, to over 1.8 billion by 2035 – accounting for nearly half of global population growth over the next two decades. Yet, even before the coronavirus, 10 of the world's 19 most unequal countries were in sub-Saharan Africa. This population growth, however, has leaned heavily on a survivalist economy. The dependence on this kind of economy makes the continent particularly vulnerable to threats such as the coronavirus or even food security, as two mere examples.

In this context, unity remains more pivotal than ever as the continent looks for avenues for economic development and increased industrialization. There is scope for greater multilateralism. We have seen a shift towards unity in the ceasefires that have been declared across the continent, yet the ongoing conflict has hampered the continent's developmental goals. The pandemic, on the other hand, has propelled the AU into action, despite past criticisms for its inability to collectively mobilize. The special envoys appointed in South Africa to mobilize international support to address the economic challenges the continent will face have been indicative of collective strength.

This may be a step in forging closer ties on the continent and could potentially enhance the scope of the African Continental Free Trade Area agreement. The implementation of this has been delayed due to the pandemic, but its importance has not been lost. The objective of the agreement is to accelerate trade within the continent, which will boost the continent's trading position in the global markets and will cushion the continent against global shocks in the future.

Perhaps one of the biggest lessons we will learn from the pandemic is where to invest our money and resources. The coronavirus has revealed deeply-entrenched weaknesses in our public institutions, particularly in the healthcare sector. While we have managed to largely avoid overcrowding of our healthcare systems with swift action from governments, this remains a challenge that must be tackled. Research and innovation need to be directed at our public services.

As we begin to rebuild and revitalize our economies, there is scope for increased emphasis on the tourism industry. One of the most crucial steps will be for countries to reimagine tourism, particularly in countries such as South Africa and Kenya, blessed with wildlife. This could be positioned as attractive to foreign tourists, given the affordability of many African countries.

Covid-19 has certainly magnified our challenges, and although we find ourselves wading through uncharted waters with no end in sight, there is hope this could be our watershed moment.



IN PARTNERSHIP WITH









BY PAULA SLIER

The writer is the founder and CEO of Newshound and the Middle East bureau chief of *Russia Today*.

y CELL phone lights up with a coronavirus joke: "After years of wanting to thoroughly clean my house but lacking the time, this week I discovered that wasn't the reason."

Laughter, it's said, is the best medicine. And there's plenty of evidence to prove it. Experts say cracking a joke can relieve mental and physical stress, reduce pain and allow us to tolerate discomfort.

It should come as no surprise then that as the world hunkers down in the face of the worst global health crisis in 100 years, gags, memes and funny videos are spreading almost as fast as Covid-19.

My cell phone lights up again: "Three hours into homeschooling and one child is suspended for skipping class and the other one has

Comedy In The Time Of Crisis: Is Laughter The Best Medicine?

already been expelled."

Black humour, explains Professor Arie Sover, a lecturer and researcher in communication and humour studies at the Open University of Israel, is a psychological means for coping with very difficult or impossible situations.

"It's both a relief system and a tool which permits sharing one's anxieties with the community."

But many criticize making light of a serious subject. With more than half a million people who've already died from the virus, it doesn't seem like the most appropriate time to be making jokes.

"Everyone has his own line," agrees Professor Sover. "It depends on culture, psychological traits and education... One has to be smart using humour, but humour should not be restricted or forbidden."

"I think many things provoke anxiety at a time like this," says comedian Yisrael Campbell.

"When it comes to dealing with anxiety and coronavirus, for some people, staying at home is soothing and for others, it's the opposite. Some people will be comforted to wear a mask outside, some people will be more anxious. I don't think we can blame humour for this, or tag it as an anxiety

One has to be smart using humour, but humour should not be restricted or forbidden.

provoker," he says.

Benji Lovitt, another comedian, says if someone is watching stand-up comedy, or reading jokes, and getting stressed out, there's nothing that can be done.

"You can't please everyone. If there are a thousand people and someone is getting offended, what are we saying, that we should shut down comedy? Forget coronavirus, should we not have stand-up comedy about relationships because someone got dumped? This is the problem with today and the masses on Twitter, the loud minority. They represent everyone. If we are worried about people getting offended, then we have no more freedom of speech. The judges say if a reasonable person would find this not offensive then that's what we should go by and not by the crazy one percent."

"By definition, racist jokes aren't funny," insists Lovitt. "The comedian should be smart and that's why comedy is tough. It often takes a professional to know where the lines are and what is appropriate. Once you start saying 'this person cannot tell this joke', it's a dangerous and slippery slope and you can't have comedy anymore. What we do know is that a person in a certain group is going to be more successful telling a joke about that group than someone who is not in the group."

With Covid-19, we are all in the same group which makes the jokes universal.

Especially now as the virus seems to be growing with no vaccine on the horizon, joking gives people a sense of being in control of an uncontrollable phenomenon. We laugh also to connect with others – something we have lost in our fight against the virus. Many people find that the joke is their warmest companion against what's happening.

DARING IN DESIGN AND AND DISPLAY

hen Samsung's Galaxy S20 Ultra launched early this year, it enjoyed all the attention a snazzy new smartphone on the market deserves.

And this one has some monster specifications to boot: such as 8K video support, 5G connectivity, up to 100x Space Zoom, powerful processor, 5,000mAh battery, 108-megapixel camera and the most dazzling of it all – a 6.9-inch screen with a 120Hz display and refresh screen rate.

The Samsung S20 Ultra certainly ticks many global firsts in terms of features, but now that the post-pandemic world has taken the sheen off retail and consumer spending, let's be honest. The S20 Ultra may be packed with the coolest specifications, but it's neither friendly to your wallet nor your pocket – as it's both pricey and weighty (taller and thicker than most).

While the S20 has the best range and its other models offer value for money, you will need to take a long, hard look at the specifications of the S20 Ultra to convince yourself that it justifies the price tag, as this latest flagship Samsung device costs from \$1,400.

But if you are in the game for the latest tech tool, the Samsung S20 Ultra definitely breaks the monotony of smartphones and is an upgrade if you can afford it.

Its dimensions apart, it has more features than its curvier peers. If you are looking for more bang for your buck, think of the new work-from-home reality that has also created some new demands for the business professional, one of which is more sophisticated technology in your palm and pocket.

The S20 Ultra comes with 5G, and on its rear, features a large rectangular camera module with four lenses including a telephoto camera for depth vision. High-resolution photographs

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can be uploaded and downloaded quickly.

The 120Hz display could be a boon for gamers as it enables smooth gaming. Samsung has also partnered with Spotify and Netflix to bring personalized entertainment; a prerequisite for any smart device at a time when the world needs at-home recreation the most.

The camera system is powered by artificial intelligence (AI). With a 108-megapixel rear camera and 40-megapixel front camera, you may switch between the two so the recording is seamless.

The S20 Ultra also uses AI to recommend good shots. With the 8K video recording (apparently the only smartphone in South Africa to offer this), the images you shoot are quite true-to-life in color and quality. And then you also do have a custom filter to customize your own personal photo filters.

The 128GB of storage seems small, given its 8K video capabilities, but you can choose to increase it to 1.5TB with a microSD card and a 12GB RAM allocation. Knox-Knox is Samsung's defense-grade mobile security platform in the device providing real-time device protection too.

It may take a while to get used to the spatial features of this heavier smartphone, but users, including iPhone converts, have admitted to being drawn by its cool core technology. Hard to ignore it, online or on retail shelves.

- By Forbes Africa





LINKING AUSTRALIA AND AFRICA WITH INDUSTRY-LEADING GLOBAL EDUCATION

For more than half a century, Curtin University has developed future leaders across the world from its campuses in Australia, Singapore, Malaysia, Mauritius and Dubai. In Africa, Curtin has been active for more than two decades, especially strong in the minerals and resources areas.

urtin University is an innovative, global university known for its high-impact research, strong industry partnerships, and commitment to preparing students for the jobs of the future.

Established in Perth, Western Australia, in 1967, the university has expanded significantly in terms of student population, degree offerings, research collaborations and global footprint. With campuses in Perth and Kalgoorlie in Western Australia, and international campuses in Singapore, Malaysia, Mauritius and Dubai, Curtin now has more than 55,000 students enrolled, with more than 7,000 of those students studying at one of Curtin's four international campuses.

For three consecutive years, Curtin has ranked among the top one per cent of universities globally in the Academic Ranking of World Universities, a highly-respected ranking system heavily weighted in terms of research performance. It is also the world's second-highest ranked university for Mineral and Mining Engineering (2020 QS World University Rankings by Subject).

Curtin's international campuses are designed to create and deliver excellent teaching across the whole university, develop research areas that address key regional and global questions that arise from their contexts, and fully engage with society, business, and industry in those geographic locations.



Professor Deborah Terry AO, Vice Chancellor, Curtin University

In 2017, Curtin established the Curtin Dubai campus. In 2018, Curtin opened its fourth international campus, Curtin Mauritius. Curtin Dubai and Curtin Mauritius offer students from the African continent the opportunity to study for Curtin University degrees closer to home.

Curtin has been active in Africa for more than two decades, especially through its strength in the minerals and resources areas, working with many African governments and industrial groups. There are currently more than 400 students from 30 African countries studying at one of Curtin's campuses. Many of these students are high-achievers who study at Curtin with government and industry scholarships. Professor Deborah Terry AO, the

Vice Chancellor of Curtin University, tells FORBES AFRICA more about the strong Africa connection:

As an operator, why Africa?

Africa has always been a key part of Curtin University's international profile. We have strong links with many African universities, government authorities and industry groups, particularly in minerals and resources, oil and gas, and public health.

As a continent with a rapidly growing and very young population, Curtin sees further strengthening of its activities in Africa. We know that African undergraduate and postgraduate students have long valued international education, and Australian education is recognized across Africa

as being among the best in the world. Curtin is committed to delivering a broad spectrum of courses to meet the needs of students and industry. Of specific focus are Curtin's strengths in minerals and energy, agriculture, health, and education – all areas that align well with the needs of many African nations.

Curtin University's involvement in the Square Kilometre Array (SKA) project is another key link between Curtin and Africa. The SKA is a global project to build the largest radio astronomy observatory ever conceived. It will observe stars and galaxies that date back in time as far as 13 billion years ago, revealing the structure and evolution of our universe. The observatory will be formed by two telescopes, one will be based in South Africa but with a presence in eight other African countries: Botswana, Ghana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, and Zambia; and the other telescope will be in Western Australia. Curtin has had a range of collaborations in astronomy with African partners and has hosted African graduate students in astronomy. The Curtin Institute of Radio Astronomy (CIRA) is the home for astrophysics and the SKA at Curtin.

Curtin is also one of 10 Australian universities which form the Australia Africa Universities Network (AAUN). Its mission is to foster strategic partnerships between Australian universities and business and industry in sub-Saharan Africa to deliver sustainable solutions to joint challenges facing both continents. The AAUN has a remit to provide advice to universities, governments, and the corporate sector, and to facilitate research collaboration.

Africa has a young population but many unemployed graduates and lack of a skilled workforce. How can there be a major restructuring of tertiary education systems in its emerging economies?

In recent times, Curtin has seen an increase in the demand for skills-based teaching. Students are looking to become educated, either at an undergraduate or postgraduate "

Tertiary education providers will increasingly need to focus on the use of technology to continue to push the boundaries of teaching and research.

level, with a focus on how the degree will help them become job-ready. Specifically, for postgraduate studies, we are seeing African students wanting to ensure their degree will help them further their careers.

From a Curtin perspective, we use leading teaching methods and technology to ensure students have a world-class university experience. We are also committed to providing students with work-integrated learning opportunities, which are an important way of ensuring that we produce job-ready graduates. We recognize the need for education to be practical and meet the needs of industry. Both our courses and our teaching methods are designed to ensure students are able to contribute to society immediately upon graduation.

Tertiary education providers will increasingly need to focus on the use of technology to continue to push the boundaries of teaching and research. Technology provides new and exciting learning opportunities and student engagement solutions for many countries in Africa. It will be important for local universities in these nations to lead the way, but collaboration with international universities can help in this space.

There are many strong universities in Africa. The key to continuing to drive improvement in higher education is investment in the sector, primarily through government funding to boost teaching and research programs – not just at the tertiary level but in primary and secondary schools. Improving the accessibility to higher education for students also needs to be a clear strategic objective of governments.

Universities also need adequate funding and structures to engage in meaningful and relevant research to address real issues facing the region.

What are the new categories of jobs that will emerge and the 21st century skills needed?

It has been estimated that 50% of the jobs our children will perform will be those that haven't yet been created. So, Curtin recognizes the need to be agile in teaching and research. We work closely with industry to ensure our degrees are aligned with the needs of industry both today and into the future. We have introduced new courses. such as our Master of Predictive Analytics, and are constantly seeking to ensure the relevance of traditional courses, such as our Master of Public Health, which has been reworked to meet the evolving demands of the global health sector. One of our most highly-regarded courses, the Bachelor of Mining Engineering, is preparing the next generation by delivering a state-of-the-art, high-tech curriculum that includes robotics, data analytics and additive manufacturing.

Curtin's Future of Work Institute houses around 40 researchers and professionals with expertise in the changing nature of work and employment. They provide research, knowledge and advice for businesses, government, and communities seeking to understand the challenges and capitalize on the opportunities presented by technological and social change, digital innovation, and automation.

What are your plans for Africa going forward?

Curtin is committed to Africa for the long-term. We have many African students already attending our campuses in Mauritius, Dubai, Australia, and Malaysia. Curtin will continue to provide opportunities for students from across Africa to complete a Curtin University degree and use their knowledge for the betterment of society.



BY NOELLA COURSARIS MUSUNKA

The writer is an international model, philanthropist and founder of Malaika, a grassroots non-profit in the DRC.

LOVE FASHION. IT'S not just part of my job as an international model, it's a way of expressing myself and my cultural heritage. I am inspired and excited by the creativity of designers and the variety of fashion choices we can have available to us. Africa has many talented designers who are being recognized on a global scale. Just recently, African designer Kenneth Ize shared the exciting news that he will be collaborating with the Karl Lagerfeld fashion house to cocreate the spring 2021 capsule collection.

Yet, when it comes to sustainability, the fashion industry has a lot of work to do. The fast fashion industry that originated in the West has accelerated fashion's negative environmental and social impact. According to the United Nations Framework Convention on Climate Change, the fashion industry uses more energy than the aviation and shipping

Re-use Clothes, Buy Ethically And Build Sustainability Into The Fashion Industry

industries put together. It also states that the industry produces about 20% of global waste water and 85% of textiles end up in landfills or are incinerated when most of these materials could be re-used. Add to this the fact that fashion is also one of the biggest employers of forced labor, and the picture is pretty grim.

Now transport this to Africa, which is already experiencing the impact of climate change and though many African countries are pioneering the fight against plastic – some have made plastic bags illegal for example – we still have plenty to do to ensure we build sustainable businesses, especially in the fashion industry.

For me, sustainability is ultimately about trying to maintain our human existence and we can't sit back and leave it to others, and this brings me to Malaika.

Malaika is the grassroots non-profit I founded in the Democratic Republic of the Congo (DRC). Its mission is to empower a community of people through education and health programs. It now comprises a school for over 346 girls and a community center that provides education and sport for development programs to 5,000 youth and adults, and we built and refurbished 20 wells that serve over 30,000 people with clean water. We have built Malaika over the past 13 years with sustainability in mind, and to us, it means using minimal resources and using them well.

Our IT suite, school and community center are powered by solar energy. In 2017, we set up our small farm where we teach organic farming and the food produced supplies the school canteen. We engage the community in a big clean-up of the village each month and our students plant trees and learn about the environment. Education is key to empowering people but it's also key to changing our

environmental impact. We are producing the leaders of tomorrow and we want them to be equipped to make an even bigger positive impact on our global carbon footprint than we have.

What can we do to reduce the effects of climate change? Firstly, I believe we, as consumers, need to hold more businesses to account. I try to do modeling campaigns with brands that are ethical and care about giving back because sustainability, to me, is also about the people who make our clothes. According to CARE International, an organization fighting global poverty, 75% of garment sector workers are women and the Covid-19 pandemic has led to brands cancelling big orders with suppliers leading to many workers losing jobs.

So, what can we as individuals do? We need to change the way we shop and ask more questions about how our favorite brands are producing their clothes. We need to take the time to investigate who is making them, what their working conditions are, and what they get paid. When I buy clothing or accessories, I ensure they are items I love and can see how they will fit in with the other clothes I own. HURR is the world's leading fashion rental platform and I use it to rent clothes for events so I can wear a oneoff piece or luxury brand item without buying it. A website I always check is eco-age.com for the latest news on global supply chains, artisanal brands, community projects and suggestions on which brands to shop. Finally, take a look at the United Nation's ActNow climate action campaign for practical tips on how you can make a difference.

Start today. It takes time and effort to change our habits but every step we take towards sustainability will help change the world for future generations. •





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THE ROAD TRIP TO M B O M B E L A

A tourist magnet, this small town in South Africa now faces its own Covid-19 crisis, but the outdoors still entice.

BY MOTLABANA MONNAKGOTLA

N THE NORTHEASTERN REGION OF SOUTH AFRICA, nestled in the verdant Mpumalanga province is a capital city named Nelspruit, now known as Mbombela, a stunning and popular getaway for city-dwellers and tourists from other parts of the country.

Personal reasons took me to Mbombela recently, with special permission to move between provinces. And in the current pandemic, with no tourists flocking the town to admire its iconic scenery or engage with the friendly locals, I had all the time and space to soak it in and capture it all on camera.

I arrived here around noon by road from Soweto, the vibrant township where I reside, 371kms away in Johannesburg.

Mpumalanga was warm in comparison with the wintry Gauteng province, which Soweto is a part of.

Although in the same country, the two provinces have many obvious differences, but the conversations and concerns around the coronavirus pandemic were the same, when I was there.

Despite Mpumalanga recording lower infection rates – and hardly any power cuts as in Gauteng – the face-mask was a common motif here too, from the petrol stations to the parking lots.

An old family friend came to pick me up in a small town called White River. He had arranged a safe place for me to rest and work in at the Kabokweni township, where he resides. The driving was different. I am used to Johannesburg's beautiful tarred roads but this time, I was up in the bumpy mountains in my 1.4-liter car. I was worried because the locals were speeding up and down and I had to be extra-careful as I negotiated my way up to my place of stay.

I was now settled and able to respond to work emails, make calls and even sample the province's tap water (although I prefer the water in Johannesburg). The next morning, it was back to business. I was up early like any professional photographer to catch the early rays of the Mpumalanga sun. It was enchanting. My friend and I wore our masks and gloves and topped our hand-sanitizers. We walked down the hill and the first stop was at the local eatery where women were rustling up African cuisine on the side of road. They could tell I was not a resident because of my accent, but didn't mind me photographing them.



About a kilometer down the road, was a church that I had spotted enroute to my accommodation the previous day. I was intrigued by the architecture of this Lutheran Church.

As we continued walking and admiring the landscape, keeping clear of speeding cars, I also spotted a mosque on the horizon, and couldn't leave without capturing it. We walked up to it and spoke to the caretaker about how they were practising social distancing here.

On our way back, I heard that 13 nurses had tested Covid-19 positive at the local clinic, so the town's inhabitants had started taking the virus seriously. However, I did discover the face-mask-and-social-distancing rules were being flouted considerably at the shopping malls.

Well before my return to Johannesburg, I had picked up and could now speak a new language: siSwati (Bantu language spoken in eSwatini and South Africa by the Swazi people). I was fascinated by how the locals spoke it and I didn't really care about what they were saying to me; I just wanted them to keep talking. I have since become a new convert to tuning in to siSwati news on the telly every day, still enthralled by how much a small town can teach fast-paced city-dwellers like me. •

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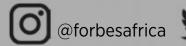
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