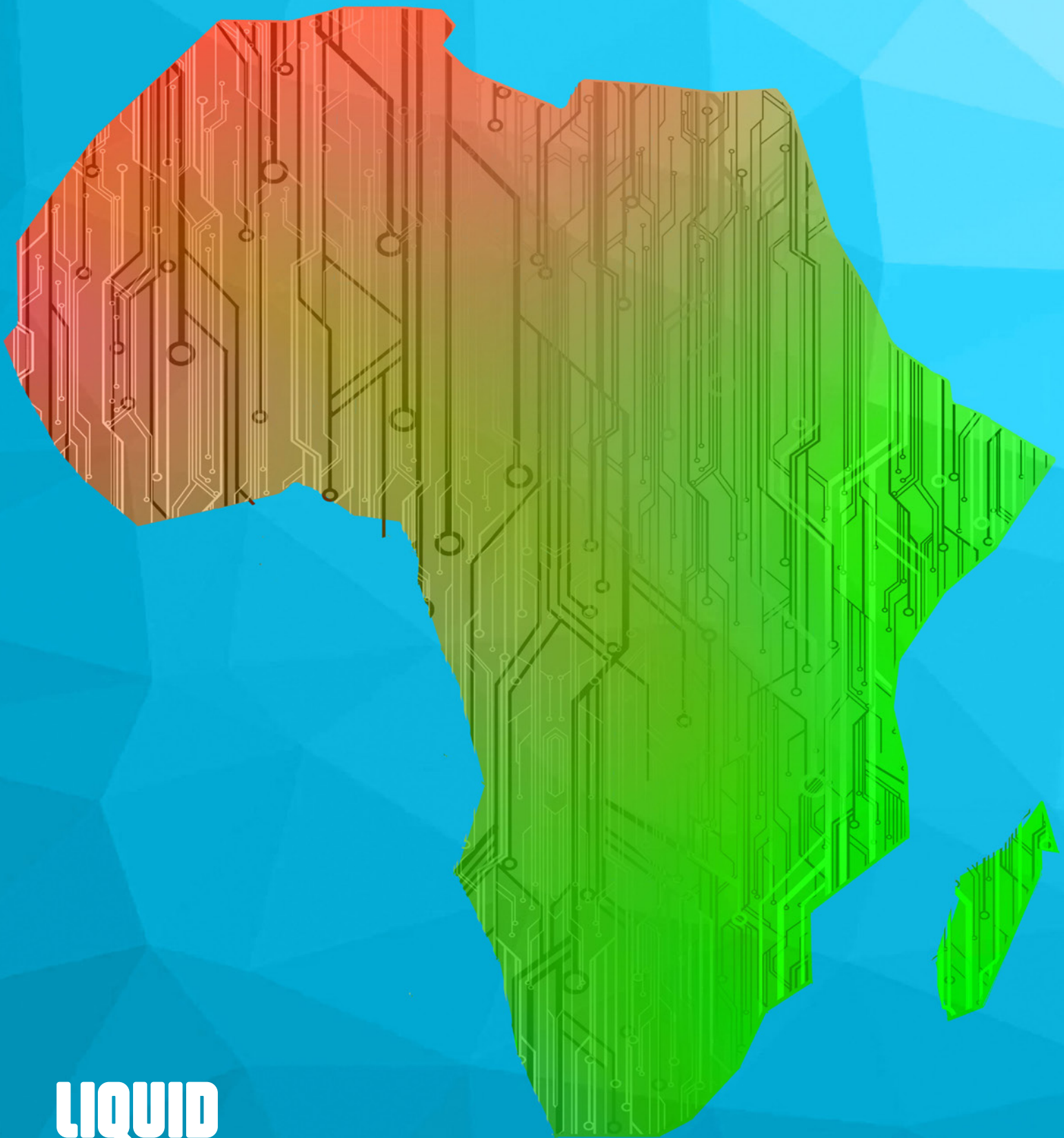


AFRICAN. GEN Z REPORT 2018



LIQUID
TELECOM

Contents

02 Introduction

By 2020, the digital economy is estimated to account for over 26% of global GDP, presenting Africa with a huge opportunity to be a part of the new digital world order.



16 Empowering Gen Z through technology

Ben Roberts, Liquid Telecom's Group CTIO, explains how access to technology can inspire a new generation of African techies.



03 Introducing Gen Z

A new generation is emerging across Africa who have never known life without the internet or social media. How will their consumer behaviour and spending patterns shape businesses in the future?

07 Digital skills for a digital future

Generation Z will play a definitive role in building Africa's digital economies in the years ahead. Here we speak to a range of businesses, start-ups and academics to find out what new skills they will need to create a successful future.



13 New media platforms for a new generation

As the world's first generation of truly digital natives emerge as consumers in their own right, the media and entertainment space is having to adapt. Fast.

17 Reaching the next level

Greater access to high-speed internet, a growth in local gaming content and enthusiastic gaming communities are all creating the perfect storm for Africa's gaming scene.



The generation that will define Africa's digital future

By 2020, the digital economy is estimated to account for over 26% of global GDP, presenting Africa with a huge opportunity to be a part of the new digital world order.

Across the region, businesses and governments are taking steps to ensure that Africa can compete in the digital age. Digitalisation is expected to bring an additional \$300 billion to Africa by 2026, and with this comes an expanding digital sector that can fundamentally change how people live and work.

However, in order for Africa to fulfil its digital potential, a new generation needs to step forward with fresh ideas, a hunger to learn digital skills and a passion to use technology for the better of everybody.

Welcome Generation Z. Born between 1995 and the early 2000s, Generation Z is the first to have never known life without the internet or social media, which has shaped their attitudes and abilities to operate online. Gen Z are not just comfortable with rapidly changing technology - they are set to become the authoritative figures on technology in the modern workplace.

The African Generation Z Report 2018 takes an in-depth look at how Gen Z could shape business and innovation in Africa in the years to come. From examining how Gen Z will consume digital services to analysing what new digital skills will be critical in the not-so-distant future, the report gathers insight and opinion from across the region.

Technology is empowering Gen Z to do things no other generation before them could. Access to information online has reduced dependency on traditional teaching methods, enabling young Africans to teach themselves coding and other valuable IT skills.

This is creating a culture of entrepreneurship amongst young adults, who are questioning traditional ways of working and adopting new approaches to tackling problems. As this report highlights, the next generation are demonstrating an enormous passion and appetite for technology. Although what is particularly heartening is how many of them aren't motivated by personal economic gain, but by the goal of using innovation to solve some of the region's largest problems and improve lives.

But at the same time, Gen Z are set to inherit some major challenges. Approximately 20% of Africa's population is aged between 15 and 24, marking the region as the youngest in the world. This age group, however, are hit the hardest when it comes unemployment and underemployment.

Over the coming years, the next generation in Africa has both the most to lose and the most to gain. Their future lies in the hands of a healthy and robust digital economy.

Editor:
Alex Hawkes

Contributors:
Gabriella Mulligan, DisruptAfrica
Tracy Burrows

Designer:
Liam Keating

Feedback:
alex.hawkes@liquidtelecom.com

Follow us:
@liquidtelecom
[linkedin.com/company/liquid-telecom/](https://www.linkedin.com/company/liquid-telecom/)
[facebook.com/liquidtelecomgroup/](https://www.facebook.com/liquidtelecomgroup/)



Introducing Gen Z Africa's next innovation driver

A new generation is emerging across Africa who have never known life without the internet or social media. How will their consumer behaviour and spending patterns shape businesses in the future? And as more Gen Zs enter the workforce, how will their new ideas and approaches alter the workplace?

Most Gen Zs have likely never posted a letter, read a newspaper, used a library file referencing system – much less an encyclopedia, searched for content alphabetically, navigated using a map, looked up a number in a phone book, rented a movie, endured a broadcaster's choice of viewing schedule, bought or used a CD/DVD, or even used a mobile device with a numeric keypad.

Gen Zs source their trivia and news from the likes of BuzzFeed and 9gag, study using SparkNotes, self-teach using YouTube tutorials, line up their own choice of streamed entertainment including vlogs on YouTube, run

real and fake social media accounts (curated for public and private consumption), instantly identify and discover music and entertainment content using Shazam on their mobiles, 'crowdsource' their opinions via social media, receive invitations via social media event alerts, group chat on instant messaging, find love via social media and dating apps, and find their way using Google Maps. This generation is immersed in a digital world.

Global Gen Z vs Millennials

Across the developed world, Millennials, who reached adulthood in the early 2000s, embraced the digital revolution and helped drive its innovation, while Gen Z was born into

a digital world and cannot remember a time before internet access, smartphones and an 'applied' world. Globally, Gen Z habitually multi-screens, is connected to a multitude of messaging platforms and social media apps, and is accustomed to a pay-per-use 'sharing' economy.

Analysts believe this generation has lost faith in formal tertiary education and the traditional career path, and may be more inclined to move directly into the workplace if possible. US marketing agency Sparks & Honey found in a recent survey that only 64% of Gen Z-ers are considering an advanced college degree, compared to 71% of Millennials.

Gen Z, inundated with information and communication channels, is reported to have a lower attention span than any preceding generation. Up to 60% of Gen Z youths polled by Sparks & Honey want to have an impact on the world, and around one-quarter are involved in volunteering. Google's study of teens, entitled 'It's Lit', concluded there were around 60 million Gen Zs aged 13 – 17, with a purchasing power of up to \$200 billion a year, thanks to their influence on household purchases.

In 2016, Instagram was the most popular platform among teen Gen Zs (59.6%), followed by Snapchat (56.4%), Facebook (52.8%) and Twitter (35.4%).

The African differentiators

Africa's Gen Z is a disparate group, however. Unlike Gen Z in the more developed world, much of Africa's Gen Z faces more basic challenges and a range of unique priorities.

While the developed world's Gen Z has typically grown up in a digital environment, millions of youth across Africa have yet to experience the basics such as reliable electricity, adequate sanitation, dependable education and digital technology.

Internet penetration across the continent still falls well below international averages, and data costs remain relatively high, excluding millions of Gen Zs from the international digital world. South Africa, with one of Africa's highest internet penetration levels, passed the 40% mark in 2017, according to World Wide Worx' Internet Access in South Africa 2017 report. This report noted, however, that income disparity was a major factor in the digital divide. South Africans on high income levels had an internet penetration rate of over 82%, while internet penetration fell below 30% among the lowest income earners.

The ITU's 2017 IT Facts and Figures report noted that in 104 countries, more than 80% of the youth population are online. In developed countries, 94% of young people aged 15-24 use the internet compared with 67% in developing countries and only 30% in Least Developed Countries (LDCs). Nearly 9 out of 10 young

individuals not using the internet live in Africa or Asia Pacific. However, given the opportunity, young people across Africa lead adoption. In Africa, where the average internet penetration is around 21%, the average penetration among youths aged 15-24 is around 40%.

Therefore one of the key differentiators between Millennials and Gen Z – growing up as a 'digital native' – does not apply to millions of African youth. This divide may align millions of youths more closely with Millennials than with Gen Z. But there is no telling how quickly they may bridge the divide and identify with Gen Z once they have affordable high-speed access.

Acknowledging the difference between international Millennials and pan-African youth, some industry watchers adopted the term 'Afrillennials' for the younger Millennials. Student Village, which coined the term Afrillennial™ after extensive research, said key

"This generation is impatient and dynamic, they adapt to change easily."

Oswald Jumira, Head of Innovation Partnerships, Liquid Telecom

'Afrillennialisms' included an indebtedness to families and community, with an associated feeling of responsibility to give back; as well as a deep commitment to transformation and cultural diversity. The differences between Afrillennials and global Millennials are likely to extend into the Gen Z zone for years to come.

The rise of the innovators

With their natural Gen Z affinity for technology, Africa's youth are poised to drive massive digital

innovation, which presents both employment opportunities for them and socio-economic development hope for their countries. Oswald Jumira, Group Head of Innovation Partnerships for Liquid Telecom, works closely with global vendors, innovation hubs, start-ups and other strategic partners across the Liquid markets to implement the group's innovation strategy. In recent months, Jumira has been developing partnerships with innovators and startups across Africa. Many of these innovators are 'cusp Millennials' and Gen Zs, he reports: "We are seeing massive innovation coming out of Africa, much of it from very young entrepreneurs. It's encouraging."

Jumira believes innovation hubs and the efforts of large enterprise to take ICT skills development to school-age youths is helping drive this groundswell of innovation among Africa's youth. "Across Rwanda, Uganda, Kenya and Tanzania, for example, there is a lot of activity in terms of teaching the youth to develop apps. And many of the award-winning and most promising apps coming out of Africa, designed by the youth, address uniquely African problems."

Africa's Gen Z is displaying value systems that differ from those of their predecessors, says Jumira: "They are growing up in a global sharing economy, so they have a new approach to ownership of goods. They are very passionate about what interests them and will immerse themselves in it. They are also very entrepreneurial, confident, and less likely to want to work for a boss."

While these traits may be encouraging in terms of Gen Z's potential to innovate, Jumira believes they will also force change in the traditional workplace. "Gen Z is impatient and dynamic, they adapt to change easily. So they might get frustrated by the 'old guard' and traditional ways in the workplace. They don't want to be taught so much as to self-teach in an environment that facilitates this."

The 'Born Free' generation

GfK research, in its report 'GenZZA – capturing tomorrow's opportunity', noted that up to 41% of South Africa's population is aged 21 or younger. While this generation may not yet have significant spending power, it is already influencing consumer behaviour and buying decisions among older generations – particularly in the technology arena. This generation is also set to disrupt across society and work in years to come, says Rachel Thompson, Insights Director at GfK.

"In defining Gen Z in South Africa in particular, we must remember that this is not only a generation raised in a digital environment, but is also the 'Born Free' generation – born after the dawn of democracy in South Africa," she says. This means that South Africa's Gen Z has been shaped not only by technology, but

also by socio-political factors. “The Born Frees are an equal opportunity generation, often the most educated in their households, and have grown up in a society characterised by uncertainty and change. This has influenced their attitudes and priorities, making them significantly different from any generation before them.”

Thompson believes key defining attributes of South Africa’s Born Free Gen Z include fluidity and disruption. Everything from gender identity and beauty ideals through to family structure and career progression is fluid in the Gen Z environment, leaving this generation free to invent themselves, the rules they live by and the world they choose to live in.

This also puts pressure on them, says Thompson: “There is so much change happening in the world and this generation is concerned about a lot – including socio-political injustice and the environment. Many are under pressure to succeed since they were raised by Gen X perfectionists, and may have been given opportunities their older relatives never had.”

Despite the pressure to perform and a plethora of challenges to overcome, Gen Z is showing several distinct attributes not seen in earlier generations, says Thompson. Among them are a solid sense of self-worth, a drive to succeed and an inclination to co-create. “In our research focus groups, we have found that Gen Zs embrace their differences and celebrate the unusual, rather than conforming to stereotypical ideals. They embrace disruption, are typically less risk averse than earlier generations, and have high aspirations and high expectations of themselves.”

Gen Z: The new consumers

GfK research has found that Gen Zs are highly enterprising, challenge the status quo and expect their voices to be heard. For future employers, this could present both challenges and opportunities.

“Enterprises wanting to be the disruptors rather than the disrupted should harness these characteristics. They should create an environment in which Gen Zs have some level of autonomy and space in which to innovate,” Thompson says.

For brands targeting Gen Z, the generation’s co-creative spirit presents opportunities to go to market in ways previously unheard of. Thompson says: “On our research question ‘I will be more loyal to a brand that lets me give input and help shape the products’, 76% of Gen Z participants said yes. This generation, with its sense of self-worth, believes its opinions count and is happy to become involved in creating products for market. So progressive brands can involve Gen Z in shaping new products, going to market with products in beta for example.”

MEET GENERATION



Hellen (20) (L) Johannesburg, South Africa

My motto: I live by “Sink or swim.”

Biggest problems facing my generation: There are so many issues that my generation faces! The main one is that we need to try, so hard to fit into this society that’s just full of issues, and it’s a society we had no role in creating. We have to somehow find a place in a society that we don’t really belong in.

My ideal workplace: My ideal workplace would be in like, a natural setting. I don’t know how – just there would be a lot of plants and nature around me. That would be so nice!

Talking tech: Technology plays a huge role in confusing me every day! It creates issues with forming your identity. It makes me feel displaced and puts pressure on me to conform to what social media says I have to be.



Lindwire (20) (R) Johannesburg, South Africa

My motto: “Own race, own pace.”

Biggest problems facing my generation: A big challenge for my generation is self-image. We are under so much pressure to focus on the superficial parts of our lives because of social media, that we have to deal with this constant feeling of never being good enough.

My ideal workplace: My ideal work environment would be modern, corporate and formal.

Talking tech: Technology adds so much extra pressure and stress to every day life and can help to make all new insecurities or encourage the old ones to get worse.... Oh my gosh! My phone literally just died!!

Dominique (22) Johannesburg, South Africa

My motto: “Carpe Diem.”

Biggest problems facing my generation: Technology rules every aspect of our lives. Technology taking over has made it so difficult for people to have meaningful or significant interactions with other people.

My ideal workplace: A corporate setting, I’d like to work in my own office with a view.

Talking tech: Technology plays a big role in my life. You use it for everything these days, you can’t leave home without your phone, or some kind of device. Even just to wake up in the morning, you need your alarm.



Gift (21)

Johannesburg, South Africa

My motto: “Explore all possibilities.”

Biggest problems facing my generation: Alcohol and substance abuse or addiction is the biggest problem facing my generation.

My ideal workplace: I want to work in a formal type of place, where I would have to wear a suit every day in my own corner office.

Talking tech: Technology is almost everything to almost everyone, these days.



Tapiwa (21)

Harare, Zimbabwe

Motto: “The game’s not over until I win.”

Biggest problems facing my generation: The biggest problem facing my generation is a sustainable way of living.

My ideal workplace: My ideal workplace would be open plan, with opportunities to develop not only in a position but as a person.

Talking tech: The first thing I look at in the morning is my phone, and my future profession might replace me with technology, which is exciting. These are very telling, “adapt or die” times, where we either deny or try to prevent innovation, or find ways to make this innovation work for us.



Tracy (23)

Johannesburg, South Africa

My motto: I don’t have a life motto, really...

My daughter is my everything, so I just live my life for her.

Biggest problems facing my generation: Teen pregnancy and drugs are some of the most serious problems that we need to face.

My ideal workplace: My ideal workplace would be fun. I would get to meet new people and have new experiences every day. I think I would get bored of having to do the exact same thing each day, there must be something new and exciting to look forward to.



Paul (16) (L)

Kenya

My motto: “God first, the rest follows.”

Biggest problems facing my generation: Technology contributes to isolation, addiction, and anti-social behaviour, affecting relationships with family, academics and co-curriculum activities.

My ideal workplace: Anywhere I can access the internet.

Talking tech: Technology has disrupted the way I do things, [and gives me] access to information and education.



Haley (17)

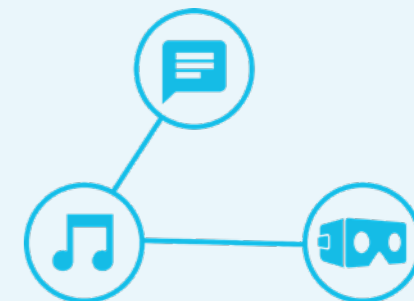
Zimbabwe

My motto: “Keep on keepin’ on.”

Biggest problems facing my generation: Placing the wrong kind of importance on technology and social media. As well as understanding how to balance our relationship with our screens with real life experiences.

My ideal workplace: An informal office set-up but, preferably my own home.

Talking tech: Technology plays an important role in my life in ways a couple years ago would have seemed outlandish. On the same phone, I’ll like a picture on Instagram, and then with nothing but a few taps on my screen I can be asking my maths teacher to re-explain a concept taught to me earlier on. Which seems kinda weird that my technology can be my biggest distraction yet also allow me to access materials that in the end help me pass school.





DIGITAL SKILLS FOR A

DIGITAL FUTURE

Generation Z will play a definitive role in building Africa's digital economies in the years ahead. Here we speak to a range of businesses, start-ups and academics to find out what new skills they will need to create a successful future.



Ixio Analytics

Megan Yates is Chief Scientist at Ixio Analytics; a South African-based data science company specialising in real-time customer insights, statistics, artificial intelligence, machine learning and advanced mathematical modelling of businesses. Megan founded Ixio in 2012 after seeing a need for strong, data-led modelling and analytics in business, and today leads the advanced modelling programs and coordinates technical requirements for clients.

"We offer advanced data services to businesses across a broad range of industries, including banking, retail, insurance and media. Our focus is on solving problems with data - and helping businesses to move away from being reactionary to using forecasting and predictive modelling to proactively manage their businesses for more successful outcomes. We use open source tools like R and Python to develop custom built solutions for our customers. We usually create custom built predictive models, and we're passionate about sharing the code with our clients. We spend a lot of time teaching and coaching our clients so they can carry on the work, and we also help develop coding skills within some bigger organisations.

I have a team of data scientists in Cape Town, South Africa and Accra, Ghana, and we're slowly expanding our operations across the region. We're seeing and experiencing a shortage of data science skills across Africa, which we want to help address.

One of the main challenges isn't around the lack of coding skills, but more the translation into business solving skills. There is a huge gap between hard-core coders and those who can develop a solution that truly works for a business. But progress is being made. There are a number of leading data science courses being run here in Cape Town, while Nairobi is also home to several business schools. Online courses, semester programmes and internships are also hugely important. The African Leadership University in Mauritius and Rwanda, for example, is aiming to train three million African leaders by the year 2066 - with computer science and data science playing a key role.

The next generation are definitely growing up with more confidence in technology and more passion for a job in the digital economy. We've had interns work with us that are true digital natives - they have a confidence with data that seems to come naturally to them. They have a great understanding of the digital

world, and they're very passionate about solving real problems that matter and change lives - not just how to increase profits. And that is certainly a generational shift that we are seeing.

With data science being a relatively new field, it can be hard for students to get hands-on experience. Even if you do a master's degree in data science, a practical year is essential. Getting involved with the code and the client can really grow a data scientist's confidence and skillset. By 2050 around 2.2 billion people could be added to the global population and more than half of that growth will occur in Africa. This will put enormous pressure on resources such as water and electricity. In the future, as the supply of these finite resources becomes critical, data science will play an extremely important role in business and society."



insight2impact (i2i)

Nkosi Ncube is Head of Application Lab at insight2impact (i2i), which aims to increase the use of client-centric and alternative data and research by financial service providers in the development of products and services for financially underserved individuals. He oversees the DataHack for Financial Inclusion (DataHack4FI) innovation competition, an initiative by i2i that brings together some of the brightest and most innovative minds from across the continent to harness the power of data science to develop new evidence-based solutions to improve financial inclusion. Last October, i2i partnered with Liquid Telecom, which is providing free high-speed internet access to start-ups entering the 2018 edition of the DataHack4FI innovation competition.

"The aim of i2i is to discover new ways to use data science for financial inclusion, but we realised early on that there was a lack of data science skills in the region.

We wanted to try to encourage young people to get into data science so we set up the DataHack 4FI competition.

The first market we launched in was Rwanda. On the first day of the competition, there were so many young people in the room. Many had come from high schools and set-up their own teams. They didn't know much about financial inclusion, but they were attracted to the competition because they want to be part of technology and innovation.

This meant many of them arrived with a passion and understanding for coding, but did not understand the business side. Thankfully,

they were willing to learn.

Since then, we've seen teenagers arriving to our competitions in our six focus countries with coding and/or mathematical and statistics skills. Some of them are studying maths or computer science at college, but many of them are self-taught and have a real passion for sharing information.

My generation had to go out and actively learn ICT skills, but technology is second nature to this new generation.

When it comes to data science, however, coding alone isn't enough. For them to be fully fledged data scientists they need to have business flair, and that's what we're trying to develop and teach through the DataHack competition. We focus on bringing three pillars together in the DataHack: (1) the young innovators, (2) coding and mathematical skills, and (3) business skills.

Young people are also learning coding skills at innovation hubs, which have a very important role in developing talent. They are a great place for them to meet like-minded people and learn new skills. Through our collaboration with in-country partners, we aim to influence the strategy and proliferation of a data science focus in these hubs.

Governments also have an important role to play. It is no coincidence that young people in Rwanda have such passion for technology when the government has placed so much importance on ICT. Likewise, the Kenyan government's initiative to bring tablets to primary schools will have a hugely positive effect.

I have a lot of confidence in this generation, which are addressing two weaknesses of the previous generation.

Firstly, they are good at thinking across borders. The entrepreneurs before used to think within their own borders, but this generation thinks big - they're trying to solve problems for everybody. At the same time, they embrace the reality that there is no 'one-size-fits-all' solution, and different regions and cultural norms necessitate innovative, tailored solutions. Secondly, this generation is attracted to teamwork, and finds it easy to form teams and share information.

If you link those trends with Generation Z's ability to code, develop software and come up with innovative ideas, then with the older generation's help on the business side, I'm confident they will take Africa to the next level."

"My generation had to go out and actively learn ICT skills, but technology is second nature to this new generation."

Nkosi Ncube, Head of Application Lab at i2i



Gebeya

Amadou Daffe is CEO and Co-Founder of Gebeya; which is building a self-sustainable ecosystem that aims to train, hire and incubate the best African talent. Gebeya aims to provide an online workplace for local IT talent to showcase and contribute their experience and skills to software projects, while providing businesses with a platform that will help them get their project built right and on budget.

“Gebeya means market in Amharic, and our goal is to create a self-sustaining market ecosystem for IT and software developers across Africa.

Gebeya was formed 18 months ago in Addis Ababa, Ethiopia when I realised there wasn't a shortage of computer science graduates, but rather that they lacked relevant work experience within an industry. Today, we take graduates in engineering or computer science and place them in our specialised industry specific training programmes, giving them the relevant experience they need for their careers. This experience could be across a wide range of industries and technologies, from Fintech to eCommerce.

At the same time, we're seeing increasing demand from organisations for IT and software developers. Some of the best clients we work with are start-ups because they have more flexibility, so we can send them a developer to work in-house or for contracted hours.

I want to position Gebeya as the company in Africa that provides the best software developers for any industry. Demand is ramping up as it doesn't make sense for multinationals to bring in expats to Africa anymore. They instead need to find local multi-lingual talent and partners to implement the solution cheaper. Demand is only going to increase further as we see the introduction of emerging technologies such as AI, blockchain and Internet of Things (IoT). We are trying to shape our business towards the fourth industrial revolution, and have, for example, begun machine learning and data science academies aimed at teaching graduates how to become AI engineers.

Africa has been playing catch-up with the world when it comes to traditional industries. But software development and technology offers the lowest barrier of entry for Africa to compete - all you need is a laptop, a brain and Wi-Fi. Young people are predisposed to contribute to the digital economy as the internet is already such a big part of their lives. But there

is a paradigm shift with the new generation - everything to them is about time. They want everything now. We must learn to cater to that and academic models must change accordingly.

This generation is the only one that can truly lift the digital economies across Africa. It is a huge opportunity, but success won't come from making products for the global market. They should focus on solutions for Africa. And they must be patient.”



Kukua

Lucrezia Bisignani is Co-Founder and CEO of Kukua; a start-up company leveraging new media and technology to empower children to learn through engaging experiences. Kukua has a dedicated team of entrepreneurs, game designers, cognitive psychologists and educational experts fuelled by the research that shows how acquiring even basic literacy and numeracy can change a child's entire life trajectory. Last November, Kukua was selected as the winner of the Liquid Launchpad competition at Africacom, beating off competition from four other start-ups to receive a six-month fixed membership at the MEST Incubator in Cape Town.

“Three years ago, we set out to design an app that could address the illiteracy crisis amongst children in sub-Saharan Africa. With the arrival of more affordable smartphones and tablets, we saw an opportunity to support children who had not developed basic reading, writing and maths skills, which are fundamental to the rest of the education path.

We brought together world literacy experts to develop the methodology for the app, and then created 30 games around this methodology. We also created a narrative of locally inspired characters and scenery that kids could truly resonate with.

We spent over two years finalising the design and production of the app. Even though production was completed at a design studio in Italy, we constantly tested the app with kids in slums, refugee camps and impoverished areas of Africa. Overall, 3000 kids tested the app and we made 500 iterations based on their feedback.

Kids were not engaged with the app content to begin with. But by the end, we had increased engagement and created a sticky product that kids spend a lot of time on - and, most importantly, which improved their literacy outcomes. One important lesson we

learnt during this process was that the design of the user interface had to be very simple. It had to be designed so that a child who had never used a phone before could navigate the application without the help of an adult. For example, we've seen other education apps where kids got stuck at the log-in stage - so we designed our log-in to be a selfie, which is simple and all kids know how to take.

It took a lot of testing to get to where we are now, and then we were faced with the distribution challenge - how do we get the app into the hands of as many kids who need it as possible? There are two ways we are doing this. The first is by partnering with governments and NGOs to ensure that our app is uploaded to the tablets that they are providing to children in schools. The second is to target families where parents can let the kids use the app at home in their spare time. In the space of two months, we had 3000 downloads from word of mouth and some excellent metrics



Children playing and learning on the Kukua app

on stickiness and engagement - kids were on average using the app three times a week with average of 30 minutes per session.

Moving forward, we've realised that it is very difficult to create a sustainable business in the education sector and so we're adopting a new innovative approach to our business model. We are writing an animated TV series centred on the main character in our app - a courageous African girl called Sema. We've already hired screenwriters and producers, and we really feel this will be an effective way to both raise our profile and expand our revenue channels. It is a long-term vision that will take us many years to achieve, but we have a lot of patience and passion - we believe we can combine education products that change lives with innovative entertainment.

I think game-based learning will have a big role to play at primary school level, where games are the best way for kids aged 5 to 8 to use their imagination and creativity. There are so many studies now that demonstrate that gaming can increase learning outcomes, and we've already seen a lot of changes in three years. Everyone now wants to use technology more in schools and the education field.

Kids in Africa are now growing up with technology for the first time. If they can see how technology can be inspiring, creative and change lives then they will want to be involved.”



East Africa Data Centre

Dan Kwach is General Manager at East Africa Data Centre (EADC); the region's largest and most secure data centre. EADC has recently entered into a partnership with Strathmore Business School (SBS), the graduate business school of Strathmore University, to launch a new data analytics centre focused on data-driven research and practices for African businesses.

“Business data has grown exponentially in recent years, but its usage in driving forward businesses had been relatively limited, until now. More companies are moving to analyse the data they collect - be it on what we buy in the supermarket, or where or how often we park in the city, or how many times we research flight prices before we book, or even what age group is most likely to load phone credit at 3am either to buy an internet data package, bulk SMS package or for calling.

The power of all this data can enable better product creation, more accurate business forecasting, mitigate business risks, and develop more efficient and streamlined marketing and business systems.

According to market research company Dresner Advisory Services, 53% of companies used Big Data Analytics in 2017, with telecoms and financial services industries leading the way, at 87% and 76% respectively.

The need to analyse huge volumes of data is prompting the creation of new facilities and tools in Kenya. In January, for example, Liquid Telecom Kenya partnered with Strathmore Business School (SBS) to launch a new data analytics centre focused on data-driven research and practices for African businesses. Liquid Telecom Kenya is providing the analytics centre with dedicated rack space and colocation services at the East Africa Data Centre (EADC), which is the region's largest and only Tier III-certified data centre. It is also



EADC, Nairobi

establishing a direct fibre link between the SBS campus and EADC in Nairobi, to enable swift handling of the huge volumes of data needed in data analytic services.

However, such huge data flows can present enormous storage and processing challenges.

To meet this demand, Africa Data Centres, part of the Liquid Telecom Group, has established state-of-the-art data centres in Johannesburg, Cape Town, Harare and Nairobi, with a combined 6,800 square metres of rack space. Liquid Telecom is helping to drive the adoption and uptake of Big Data Analytics as the next 'must have' strategy for any business to run smoothly and smartly, enabling users to increase sales and beat the competition in a new era of multiple tools and methods for the extraction, analysis and presentation of data.

The ultimate winners will be businesses, consumers and start-ups, as well as millennials and Gen Zs that are pursuing computer systems and related courses - with software coding, statistics and data analytics increasingly becoming lucrative disciplines, especially when combined with machine learning and Artificial Intelligence (AI) knowledge.

Ultimately, the future workforce will be able to create applications in real-time that facilitate the creation of groundbreaking products and services.”



Strathmore Business School

Dr George Njenga is Dean of Strathmore Business School in Nairobi, Kenya. With over 8000 students, Strathmore University has become one of the most respected private universities in the region. It is a leader in ICT and innovation through its research centre I-Lab, and has created partnerships with top universities all over the world such as Harvard, IESE Business School in Spain, New York University, the Massachusetts Institute of Technology (MIT) and Columbia Universities among others.

“It is more important than ever before that the next-generation adopts a multifaceted approach to data science. Learning how to analyse data and extract information from data is important, but at the same time they must learn how to work alongside different types of people and organisations

That's why data science is a core competency across all our curriculums because it applies to almost every industry vertical.

We might see, for example, students studying marketing, finance or maths who

are involved in designing apps for agriculture, healthcare or forensic science.

Another exciting development is that a lot of students are taking separate courses in programming or coding online. They recognise that today you can build anything as long as you build it with data.

In Kenya, we have the “hustler mentality” - which means you might be involved in a particular profession but you're also working two or three other jobs to generate cash. Therefore we're not too concerned about training students in a particular field - we want to develop multifaceted students.

During the 19th century, Africa never industrialised like other parts of the world. We didn't make that jump from raw materials to processed materials, and so we lost the mindset that comes with specialised industry.

But now the next generation has a real opportunity to be part of the global digital economy.

I will give you a good example of how important Generation Z can be to our digital economy: Back in the late 1970s, the Kenyan government began running outreach programmes to small and medium farms, providing advice on how to plant and sow crops.

Over the last 20 years, that civil service function was lost and the business community did not step into help them.

Now I have a student who has designed the function of a traditional agricultural outreach officer using a phone. It can test the soil humidity and quality, and offer advice to the farmers on the phone.

Technology is enabling Africans to access technical information, which is bringing more and more people into the economy for the first time through online platforms such as smartphones or tablets.

The digital economy needs young people. Not only do they have the confidence and knowledge when it comes to technology, but they have the ideas too.

This generation has more of a link to welfare and society than ever before. It makes me proud and grateful to see so many of my students focused on developing solutions to help others. They are doing a great job.

Academic and industry collaboration will be fundamental moving forward - but this isn't a matter of just asking for a job. It is about what students can bring to the table.

That's why developments such as the new Strathmore Africa Analytics Data Centre are so important. It's the first analytics centre of its kind that provides students with access to data stored in a commercial data centre, enabling them to engage in data-driven research and practices.

It means we can bring students into the data appliance field long before anyone else has.

The next generation will also be responsible for addressing some of the challenges presented by a digital economy. How do you democratise online? How do you create a safe environment for everybody?

They need to think very seriously about the ethics and morality that comes with new technologies like Artificial Intelligence (AI).

I'm confident they will be able to come up with the solutions.”



Africa's Cloud is Liquid.TM

Cloud computing accelerates every aspect of your business but it only works as well as the infrastructure supporting it. As an official Microsoft CSP partner, only Liquid Telecom can combine enterprise-grade reliability and performance from Microsoft Cloud with an award-winning fibre network.

So now you can access tools virtually anywhere on almost any device. Whether you're working online or off, from your computer, tablet or phone, we have your business covered with Microsoft Cloud.

Contact Liquid Telecom today to discover how cloud can transform your business.



www.liquidtelecom.com

Building Africa's digital future

Liquid Telecom trademark notice. "Liquid Telecom", "Liquid", "the Liquid Telecom Logo" and "Hai" and "the Hai logo" are registered trademarks © of Liquid Telecommunications Holdings Limited and its affiliates and "the Liquid Telecom Cloud Logo" and "Africa's Cloud is Liquid" are trademarks TM protected by law of the same company (altogether the "Marks"). All rights reserved. You may not at any time or for any purpose use the Marks or the name "Liquid Telecom Group". © Copyright Notice. Liquid Telecommunications Holdings Limited 2017. All rights reserved.

NEW MEDIA PLATFORMS FOR A NEW GENERATION

AS THE WORLD'S FIRST GENERATION OF TRULY DIGITAL NATIVES EMERGE AS CONSUMERS IN THEIR OWN RIGHT, THE MEDIA AND ENTERTAINMENT SPACE IS HAVING TO ADAPT. FAST.

Generation Z consumers are showing new attitudes and appetite for consuming content. And content providers haven't necessarily worked out how best to cater to them. The race is on to gather and understand data on this emerging tech-savvy consumer group, who hold the future of the content space in the palm of their hand.

In Africa, the impact of Generation Z will be felt more than anywhere else in the world. As the world's youngest region, approximately 20% of Africa's population is aged between 15 and 24. But Africa is on the precipice of a staggering global phenomenon - it is the only region where the proportion of its youth population has not yet peaked. The continent's young population is set to grow by 42% by 2030 - and by 2055, this age group will have more than doubled on 2015 figures.

There's no denying it - Africa's youth will be the new economic heavyweights and their mass involvement in the market changes everything.

Generation Z is also the first to have grown up completely at home with consumer technologies - to them, mobile and connectivity are not mere commodities. All of which, poses a big challenge for businesses in the content space.

Talking about my generation

Online music service Mdundo is a good example of how content delivery is changing to cater for the next generation of consumers.

In 2017, Mdundo saw 12 million people make use of its African music streaming and downloading platform - 32% of these users are aged between 18 and 24. It is the sheer size of Africa's Generation Z which gives them so much power as a consumer group, believes Mdundo CEO Martin Nielsen.

"We see them as a key market because they account for such a big chunk of the population and hopefully will also be the same people who start paying in the future when they have stronger purchasing power," he says.

However, Generation Z can be notoriously difficult to please. Nielsen says Generation Z is the most demanding of all Mdundo users, and they expect to find all the content they want at their fingertips. "They are very demanding and require a 'full content solution', and they will not use services that cannot give them everything they are looking for," he says.

While Generation Y proved to be loyal to a particular service or brand, the same can't be said of Generation Z.

"We see lower retention in this group and they very easily give up using solutions unless they satisfy all their content needs - piracy does and for them it's superfast and easy," says Nielsen.

Gen Zs want content - and the more of it the better. Across all ages, approximately 95% of the songs streamed on Mdundo are from local musicians and artists. Yet, Generation Z still likes to know it has access to the latest international hits: "They are not necessarily very interested in listening to Ed Sheeran, but they want to know that they have the option. Whereas the older users care less about this and more about the music they actually want to listen to," Nielsen says.

Mobile-centric youth

As a result, content providers are becoming mass aggregators of content - stocking both the latest local releases as well as back catalogues of international content. At the same time, Gen Zs are hyperaware of data costs, and this constrains how much content they consume.

First and foremost they want to be able to interact on social media, and secondly they want to access video. Content providers therefore have to think carefully about how they can design their products to accommodate this.

For IROKOTv; one of the first video-on-demand platforms focusing on Nollywood films and series, this means focusing the consumption of its content on mobile platforms.

"We have completely revisioned and built our product to be mobile first, second and third. So the way people consume media has been the main informant of how we structure our company and build our products - and this is something that will inform all of our key product decisions going forward," says Matteo Cuellar, Head of Product Design at IROKOTv.

While IROKOTv doesn't track Generation Z as a specific user sub-group, an indication of the platform's popularity among young users is found in the fact that 32% of its users are aged between 18 and 24.

The preference for accessing content via mobile spans all age groups in Africa, however, younger users are characterised by their use of lower to mid-level devices, IROKOTv has

found. This means that in order to tap into younger consumer groups, platforms need to function seamlessly on even the most basic mobile device.

This challenge again is linked to the high cost of data in many African countries - content providers must offer solutions that work well on entry-level devices, with the lowest data requirement possible.

"In our efforts to make IROKOTv accessible to everyone, we make sure that our app works on the most basic device. Our engineers spend a lot of time working on the efficiency and performance of the app. We also introduced downloading to the IROKOTv app in 2016, which includes a low-quality download option to give the user the option to save on data cost," Cuellar explains.

From a content perspective, IROKOTv is finding that social media is playing an influential role in the types of content preferred by different age groups.

While the platform focuses on Nollywood, the company has found young users demand access to the latest films which they see advertised on social media - compared to older users who have favourites, or also want to access traditional content.

"This is arguably due to increased use of social media where newer movies are promoted and hyped by celebrities and producers," says Cuellar.

Multi-screen marketing

Pan-African video streaming services platform Kwesé Play is also discovering innovative ways to cater to the emerging African consumer of the future.

Dubbed the "home of Netflix in Africa", Kwesé Play has a partnership to offer Netflix services across the whole of Sub-Saharan Africa, and also offers other leading streaming services such as YouTube and Tuneln.

The company defines Generation Z as "choice conscious Africans", who use a combination of devices at the same time to consume content. "Mobile has become a natural extension or



accessory to Gen Z, but a TV screen is still the primary screen for watching TV,” says Tracy Aberman, Head of Product at Kwesé Play.

Aberman agrees that young users can be difficult customers, and “seek instant gratification”. But while young millennials have grown up

“Any type of content that allows them to be socially engaged while watching their favourite programme will have Gen Z flocking to their TV screens.”

Tracy Aberman, Head of Product at Kwesé Play

to be “data conscious”, it’s the digital natives or Gen Zs who see data not so much as an allowance but a commodity, says Aberman.

Key to satisfying this young user group’s demands is high-speed quality internet. “One thing for sure is that when it comes to customer experience, these users can be very unforgiving. According to Google, 53% of mobile users abandon sites that take longer than 3 seconds to load. Gen Z have grown up with the same expectations for streaming TV – if it takes too long, they will move on,” Aberman says.

Social media interaction has become an integral part of content consumption for the digital native generation. According to Aberman, social engagement has become a central strategy pillar for content providers, necessitating a dedicated team of staff.

“Any type of content that allows them to be socially engaged while watching their favourite programme will have Gen Z flocking to their TV screens. While not a new concept, the value of social TV has moved from being a campaign-driven idea to an ‘always-on’ strategy that requires a dedicated set of people resources who understand their content offering inside and out.”

The experiences and data gathered by various media and entertainment organisations as Generation Z begin to emerge as consumers in their own right clearly varies, but the overarching position of all players in this space is the same: Generation Z is set to become the biggest consumer of content in the market. “At the end of the day, we cannot control the exponential rate at which the world is adopting new technology. But we can control what we do with our data in order to reach massive audiences - by making or supplying content people want, rather than making people want content – and doing it in the fastest way possible,” Aberman concludes.

New content delivery channels make their mark

Across Africa, innovative new content delivery channels are taking over from traditional media: print, radio and even television are out. Online, vlogging, and social media is the new order of the day. Here we look at examples of successful local content that reflect this new trend...

BustopTV



BustopTV

Youth-run Zimbabwean media outlet BustopTV launched in 2014, producing video content around political and social issues affecting society - through a satirical “skit”-type model. The online TV platform quickly gained popularity, particularly on Facebook. However, it was not until 2016 that the founding team realised the potential of using the BustopTV’s social media presence to grow the company’s revenues. They began to monetise BustopTV’s YouTube channel, which has over 22,000 subscribers. The channel has since brought in over \$3,500 - testament to the increasing tangible impact of social media on local businesses.

Mzansi Magic

It’s not only emerging content producers that are adapting to the rise in social media engagement. South African DSTV channel Mzansi Magic has been around since 2010 and is the product of M-Net - so by no means new to the media scene. But today, the channel’s shows are characterised by their total take-over of local social media during broadcast - trending at number one on Twitter each time an episode is showing.

Open Parly ZW

Open Parly Zimbabwe aims to increase youth engagement with politics in Zimbabwe, through an internet and social media-powered citizen journalism initiative. The website sees young people publish their own news and analysis reports from the Zimbabwean parliament, and encourages

transparent discussion between the country’s youth and politicians via the initiative’s Twitter account. The concept has proven extremely popular, with over 40,000 Twitter followers and a million visitors to Open Parly’s Twitter page each month.

Pap Culture SA

Cape Town’s popular YouTube channel Pap Culture SA was created in 2015 by an all-female team of video enthusiasts who felt there was no platform available for South Africa’s youth voice. The channel is dedicated to discussing topics relevant to young South Africans - from politics and social issues, to entertainment, celebrities and events. Long-time lovers of video, the young founding team has built Pap Culture SA specifically as an online content platform delivered via YouTube, attracting half a million views to date - speaking to the changing preferences of Generation Z on how they access video content.

Don’t Lose the Plot

The creators of TV show “Don’t Lose the Plot” had one objective in mind - to use video and modern entertainment trends to give agriculture “a new look”. The East Africa-based show sees four young contestants given a farming plot for a season, competing to be the most effective and business-minded farmer - with the winner securing \$10,000 in farming investment. The show aims to contribute to achieving food security by promoting farming as an attractive career for youth - leveraging reality TV and a competition format to change the sector’s outdated reputation. The tactic seems to work: in 2017, 3.4 million households across East Africa tuned in each week.



Don't Lose the Plot

Empowering Generation Z through technology



Ben Roberts
Group CTIO, Liquid Telecom

Ben Roberts, Liquid Telecom’s Group CTIO, explains how access to technology can inspire a new generation of African techies.

The future of Africa belongs to Generation Z. As the world’s youngest region, approximately 20% of Africa’s population is currently aged between 15 and 24.

But the hope and promise of this generation also presents potential disaster if there aren’t enough new jobs to sustain them.

No industry or business today has been left untouched by digital disruption. The way society interacts online has fundamentally changed – and a lot of jobs that exist today could be gone in the not-so-distant future. The way we work at Liquid Telecom is changing. Traditionally, the focus of our company has been on infrastructure and we have huge engineering teams across Africa deploying fibre and configuring our networks. We’re good at it: we’ve so far built the region’s largest independent fibre network stretching over 50,000km and connecting 9 countries. But today our focus has turned towards digital services, and how we can support our customers further along with their digital journey – we’re currently doing this by providing leading cloud-based services, such as Microsoft Office 365 and Microsoft Azure. This means not only are we transforming the types of services and products we sell, but we are reimagining the way we work and engage with our customers.

Digital skills will be fundamental to both the future of Liquid Telecom and Africa. And I’m a big believer of empowering youth with technology to teach themselves those skills.

I was 14 when I earned enough money delivering newspapers to buy my first computer: a ZX Spectrum. I taught myself BASIC programming by reading books and magazine articles, as well as copying code. Primarily our objective of writing code at age 14 was to create games and music or hack into commercially purchased games, such as to grant ourselves unlimited lives or special powers in the game.

We had an IT lab at school, but teachers and parents had no particular involvement in my IT education – it was, and still is, my passion. ICT initiatives, such as the Kenyan government’s Digital Learning Programme (DLP) which has already seen 70,000 tablets distributed to public primary schools throughout the country,

will be critical in providing kids with access to online resources – which also means they are no longer reliant on the standard of local teaching. Africa needs to consider that it may be the role of the children to teach ICT skills to their elders, rather than the other way around.

The rising popularity of video gaming across

“Africa needs to consider that it may be the role of the children to teach ICT skills to their elders, rather than the other way around.”

the region could also prove to be a catalyst for inspiring a new generation of techies. Kids love to play games, and with the gaming industry changing beyond recognition over the last 10 years, they now have access to an abundance of online games on their mobiles, tablets, desktops and game consoles.

We saw the pent-up passion and enthusiasm for gaming first-hand at last year’s Nairobi Comic Convention (Naiccon), where we provided high-speed internet for the region’s first ever international multiplayer gaming tournament. With virtual reality on the horizon, kids are only going to be more absorbed by the limitless fun of gaming.

Gaming can also enable kids to learn while they play, and with the right balance, they won’t even realise they’re learning while they’re playing. Kukua, who were the winners of our Liquid Launchpad competition last year, are doing some great work in that regard – by building mobile games that help children in Kenya learn basic writing and reading skills.

We need to start preparing for the arrival of Generation Z in the workplace. For a start, CIOs need to make sure their networks are in order – Gen Zs see access to social media platforms and video content as a basic human right, and companies could have to find new ways to balance their Wi-Fi to accommodate IT systems and personal use.

We also need to start preparing for the arrival of Generation Z as consumers. And that could prove trickier. We’ve already seen that brand loyalty doesn’t exist in the same way with this new generation. They’re much more influenced by fashion and trends. Facebook, for example, was out - with one study exposing that it is losing its share of the 12 to 17 year old market for the first time – and snapchat was in. And then one tweet later from a Kardashian, snapchat was out too – the company’s value dropped a reported \$1.3 billion after a negative comment from Kylie Jenner.

One thing is for sure: the arrival of Generation Z is going to keep things interesting.



Anybody remember this?
Ben’s first computer was a ZX Spectrum



Greater access to high-speed internet, a growth in local gaming content and thriving gaming communities are all creating the perfect storm for Africa's gaming scene.

Gamers are a passionate bunch. Last July, over 3000 comic book, gaming, animation and movie fans descended upon the Nairobi Comic Convention (Naiccon) for two days of creative workshops, cosplay competitions and gaming tournaments. With a total of 16 PC and console gaming teams competing from Kenya, Uganda and Rwanda, the gamers arrived at 9AM and played straight through the night until 7PM the following day when the event closed.

And it is precisely this sort of enthusiasm that is helping to turn gaming from a hobbyist, grass roots movement into an exciting new industry for many African countries. While South Africa has an established gaming scene – complete with large expos and established gaming communities – there is now pent-up demand from gamers across the rest of the region.

Change is underway. According to gaming analyst firm Newzoo, estimated gaming revenues in Egypt (\$205 million) and Nigeria (\$168 million) surpassed South Africa (\$118 million) in 2017.

Revenues are growing elsewhere in the region – Kenya, for example, had estimated gaming

revenues of \$30 million last year, while Morocco had \$86 million.

From grass-roots level up

Much work is currently being done at grass-root level to raise the profile of gaming and address some of the barriers to entry.

Greater internet access has played a significant role in enabling more of the population to play games – be it on their mobiles, consoles or personal computers. But there is still a major divide between gamers in Africa and the rest of the world. The rollout of additional fibre will play a key role in satisfying the demand for real-time, multi-player games, which rely on fast and consistent internet speeds – as even a minor delay or disruption in speed of service can cause a major impact to a game. Throughout Naiccon, for example, Liquid Telecom supported the multiplayer gaming tournament with unlimited bandwidth, with usage peaking at 750Mbps and never dropping below 100Mbps. “The internet provision was the best the gamers had ever experienced the event,” said Naiccon organiser Thomas Imboywa, who launched the first event in 2014 when he and his

friends were unable to attend Comic-Con in San Diego. “The tournament was streamed live on Twitch, YouTube Gaming and Facebook, while gamers connected directly to Liquid Telecom servers to play the games.”

This quality of the network at the event has helped inspire more gaming communities to attend the next Naiccon event in August: “The reception to last year’s event was awesome, and now we have gaming communities from Ethiopia, Zambia and Zimbabwe who would also like to come compete at the 2018 tournament,” says Imboywa. “Right now we’re very excited – it’s an amazing time for e-Sports globally and in Africa.”

Online multiplayer gaming requires dedicated servers, which have so far been missing in many African countries. Multi-player gaming communities like GamersNights in Uganda have been instrumental in not only bringing together enthusiasts, but also in addressing the challenges facing African gamers. “In Africa, a key problem is latency,” says Kyle Spencer, a founder of GamersNights and an Internet technology specialist focused on African infrastructure, content and policy development. “Prior to launching our own servers in 2009, gamers in Uganda would experience delays of 600 milliseconds or more when playing online. The East African region was still connected to the rest of the world via satellite and all of the gaming servers were hosted on other continents. This made it impossible to play. The arrival of submarine cables helped to reduce this delay, but the round-trip time to Europe is still 250 milliseconds or more.”

GamersNights initially hosted East Africa’s first online gaming servers on a private hospital network they had access to in Uganda. They hosted events and encouraged other gamers in the country to connect. In 2012, GamersNights partnered with Liquid Telecom and moved the servers to their network in order to take advantage of their rapidly expanding regional fibre-optic network. This made it possible for players from other countries to compete on the same servers for the first time ever. These are the very same servers used by gamers at last year’s Naiccon.

Tapping into local content

Another important contributor to any gaming scene is local gaming content. Game development studios have emerged in many African start-up hubs, including South Africa, Nigeria, Ghana, Kenya and Zambia.

Take The Innovation Village; a hub and co-working space in Kampala, which has seen a rise in the number of gaming developers using its facilities. “We have a community of gaming developers building content for businesses and stakeholders,” says CK Japheth, CEO and co-founder of The Innovation Village. “But we also have a community of hard-core gamers who



Last year's Nairobi Comic Convention attracted gamers from across three countries

are into eSports. Recently both communities have discovered they have much in common and can learn from one another.”

And it seems gaming is in vogue with the investor community right now: “The gaming developers attract a lot of interest from visitors to the hub, which are typically investors or businesses. They want to know how to gamify their content,” says Japheth.

Investors will be attracted further by stories like Matatu. Developed by Kola Studios, the mobile app is based on a popular local Ugandan card game, and today has over 200,000 game downloads on Google Play store and more than 90,000 monthly active users. “The game is very specific to Uganda and has been played here for a very long time. It is important to have that familiarity when it comes to new products,” says Sharon Rwakaturu, Operations Manager at Kola Studios.

Kola Studios has since been trying to expand its portfolio by launching other games in Uganda and East Africa, as well as building games for corporate clients. “Making popular games is one thing but building a sustainable business is another,” says Rwakaturu. “The appetite for gaming is growing, and our downloads keep increasing as smartphones and tablets become more affordable. But many businesses are still hesitant to advertise on a game, which is holding the market back a bit.”

As one of the only virtual reality (VR) production companies in East Africa, BlackRhino is also trying to find new ways to increase investment in gaming. Established in 2014, the company specialises in creating cinematic immersive experiences for different companies and organisations, while at the same time developing its own unique local VR content. Facebook’s \$2 billion acquisition of VR start-up Oculus Rift in 2016 certainly helped raise interest in VR, but there is still some market education to be done across the region: “We are trying to demystify the technology,” says Brian Afande, Black Rhino’s

Head of Business Development. “Our aim is to make Africa’s unique experiences and cultural heritage accessible to everyone in the world through the power of VR.”

BlackRhino is doing this in two ways. Firstly, it has a growing portfolio of corporate customers, and has created local VR content for the likes of UNICEF, Shell, Safaricom and Kenya Wildlife Services (KWS). Secondly, it runs a series of workshops, hackathons and networking sessions aimed at exploring new use cases for VR across East Africa. “For example, we think VR can play a big role in education and we’re currently building Africa’s first VR educational platform,” says Afande. “We’ve also started a non-profit organisation called ‘VR Without Borders’, where we go visit local communities and provide them with VR experiences.”

Afande sees the next few years as being crucial for raising the profile and investment in VR. “We need investors to come and see that VR can be an important industry in East Africa, and that we can develop world-class VR solutions. From real estate to sports, VR can have an impact in every facet of our economy.”

Africa’s first eSports stars

A generation of local eSports stars would certainly help raise the profile of gaming further in Africa. And there has been considerable progress on this front. Last year Kwesé Sports, Econet Media’s premium sports content platform, signed an exclusive, five-year deal with the world’s largest eSports company ESL, to distribute ESL content and host events across Africa. The partnership saw Kwesé and ESL bring the first ever continental eSports championship to Africa, and launch the region’s first 24/7 eSports channel. “2017 was a landmark year for African gaming in almost all aspects. With Kwesé bringing ESL to Africa, we were able to host the first continent-wide tournament,” says Bradley Kirby, Head of Esports at Kwesé. “Not only did this put

a vast amount of cash into the eSports prize winning ecosystem, but it also created more opportunities for talent around the periphery as we proudly showcased some incredible African talent and brought sports level broadcasting to eSports which has not been done on this continent before.” But it is not just about raising the profile of eSports in Africa. It is also about exposing more African gamers to the international scene. “We are hoping to carry on the momentum of an awesome 2017 into 2018 as we firmly put Africa on the eSports map. It is heart-warming to identify and showcase our local talent by telling these inspiring stories to our audience across Africa,” says Kirby.

Greater interest and investment in eSports will only help to bring down the digital

divide between African gamers and the rest of the world. “The more numbers that we have involved in gaming, the greater the opportunities presented to everyone in the ecosystem,” says Kirby. “There has never been a better time to earn a living from gaming as there is today. From winning vast amounts of prizes, sponsorships, endorsements, content creation, streaming, vlogging etc.”

Kirby also see Generation Z as absolutely crucial in taking gaming to the next level: “From multiple screens and devices to streaming, genres and interactive content. I firmly believe that their abilities are slightly enhanced. From an increase in fast-paced and accurate reactions and reflexes to being able to track more multiple targets moving at different

speeds and directions in 3-dimensional space than before,” he adds.

Talent and passion will help drive Africa’s gaming scene over the coming years, but its success also hinges on greater support from the business community. “As part of the Liquid Telecom Innovation Partnerships strategy, we are investing together with our partners to help create a captive and engaged gaming community across Africa that will present new opportunities for the African gaming industry. We intend to attract the large gaming companies to locally host their gaming platforms in Africa, and also enable gaming entrepreneurs to create the next African-centric games,” says Ben Roberts, Group CTIO, Liquid Telecom.

Meet Africa’s youngest app developer



At the age of just 6 years old, a Tanzanian student called Ethan developed his own Android game called Ethanman. Here Ethan’s mum Irene talks us through his passion for technology and innovation...

At what age did Ethan start showing an interest in gaming?

Since Ethan was 3 years old, he has always been very interested in video games - particularly superhero related ones. With gaming apps becoming available on mobile handsets, Ethan’s interest grew and he would download loads of games on his father’s iPhone and iPad. On his fifth birthday, his father got him an android mobile phone that he primarily uses for gaming. When he realised his superhero characters were not real, he wanted to create his own ‘real life’ superhero character (based on himself) with super powers that children could emulate.

To test his seriousness, we suggested that he writes a book about his character. He wrote his first book titled “When I Grow Up” to inspire kids to dream big and be what they want to be. We were truly moved and impressed with his drive and vision.

How did Ethan learn the skills to develop an app?

Ethan connected with an innovative learning organisation called i-Learn East Africa who worked with him to turn his book into an interactive animated book. And then an app development start-up called Tujenge Technologies worked with him to create his EthanMan app.

The team, which was led by Ethan, worked together to bring his vision to reality. Ethanman was launched on June 16 2017 at an event for the Commemoration of the Day of the African Child. Ethan was only a 6-year-old student in grade one at this time.

He is so driven to inspire other kids through his EthanMan character and platform. He is currently taking coding lessons so that he can “make his games and app super awesome!”

Does Ethan plan to develop more apps?

Ethan hopes to expand the EthanMan universe – with an EthanMan

cartoon series, EthanMan merchandise and more games and books. He wants children to order EthanMan-inspired cakes and wear EthanMan-inspired costumes on their birthdays.

He has a BIG vision and at the core of all this is teaching, inspiring, motivating and engaging children in a way that adds value and allow them to live their full potential. This is well captured in his tagline: “There Is A Superhero Inside You Too!”

Does Ethan hope he will inspire other children of his age to also explore app development?

Ethan hopes to inspire other children beyond app development. He hopes that there will be more children out there encouraged to take interest in technology and innovation, who will be encouraged to follow their dreams and take a positive path while growing up.

He wants to use his app and character to teach children - through a structured supportive curriculum (like Montessori) - about values and positive character development.

What would Ethan like to do when he grows up?

We are hoping that with the right support EthanMan will be his thing as he grows up. We as parents believe in children having a free mind to dream of what they want to be. Ethan has definitely shown a desire to inspire others to be the best in any field.

The amount of energy Ethan puts into learning – be it video gaming, music or sports – is amazing. We think with the right opportunities, exposure and focus he could be an inspiration to many kids and a great ambassador of excellence in whatever they do!



Ethan playing with his EthanMan app

About Liquid Telecom

Liquid Telecom is a leading communications services and solutions provider across 13 countries in Eastern, central and Southern Africa that serves carrier, enterprise and retail customers with high-speed, reliable connectivity and digital services.

It has built Africa’s largest independent fibre network, spanning over 50,000km, and operates state-of-the-art data centres in Johannesburg, Cape Town and Nairobi, with a combined 6,800 square meters of rack space.

This is in addition to leading cloud-based services, such as Microsoft Office365 and Microsoft Azure, and innovative digital content provision, including Netflix, NBA, TED and Kwese Play.

Through this combined offering, Liquid Telecom is enhancing customers’ experience on their digital journey.

About Liquid Telecom Innovation Partnerships

The Liquid Telecom Innovation Partnerships initiative was launched in 2017 and is aimed at supporting the growth of digital technology innovation across Africa.

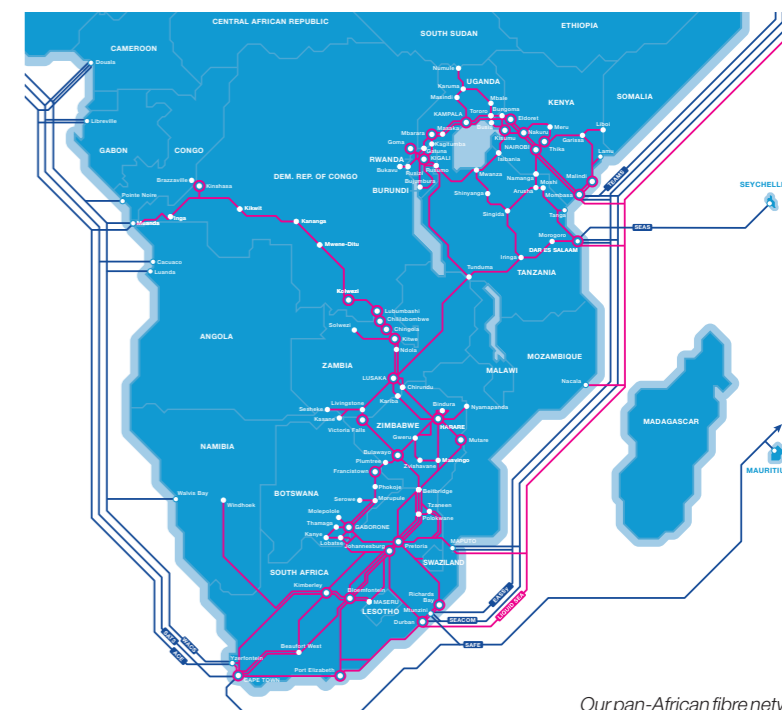
By bringing together key players from within the region’s innovation ecosystem, Liquid Telecom is helping technology companies originated and founded in Africa to scale through mutually beneficial partnerships.

Under the Innovation Partnerships initiative, Liquid Telecom is providing start-ups in the region with connectivity and cloud-based services, and through Go Cloud - a new programme launched by Liquid Telecom and supported by Microsoft – is also raising awareness, adoption and usage of Azure Cloud across Africa.

A look at some of our partnerships so far...

January 2018: Liquid Telecom partnered with Strathmore Business School (SBS), the graduate business school of Strathmore University, to launch a new data analytics centre focused on data-driven research and practices for African businesses. Strathmore Africa Data Analytic Centre will be hosted at East Africa Data Centre (EADC) in Nairobi where it will provide businesses with data analytics services.

December 2017: CEC Liquid Telecommunications is helping to accelerate Zambia’s emerging gaming and Internet of Things (IoT) ecosystem through a new partnership with BongoHive; Zambia’s first innovation and technology hub. As part of Liquid Telecom’s ongoing African Innovation initiative, start-ups in Zambia will have greater access to high-speed internet and cloud-based services.



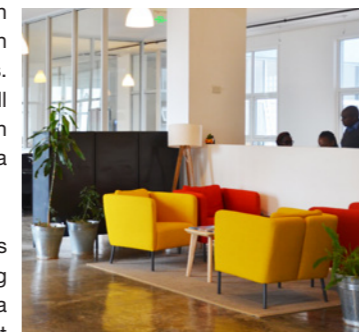
Our pan-African fibre network

Liquid Telecom is providing start-ups in the region with connectivity and cloud-based services.

November 2017: Liquid Telecom Uganda partnered with The Innovation Village, a hub and co-working space in Kampala, to support Ugandan start-ups with high-speed internet and cloud-based services. Liquid Telecom Uganda will work alongside The Innovation Village to provide new opportunities for start-ups operating in Kampala, enabling access to additional resources and expertise that can help them scale and launch locally relevant solutions.

October 2017: Liquid Telecom is supporting start-ups entering the DataHack4FI innovation competition by providing free high-speed internet access and cloud-based services. Now in its second year, the DataHack for Financial Inclusion (DataHack4FI) competition, an initiative by insight2impact (i2i), brings together some of the brightest and most innovative minds from across the continent to harness the power of data science to develop new evidence-based solutions to improve financial inclusion.

September 2017: Liquid Telecom Kenya begins providing free internet to Nairobi Garage’s newly opened Entrepreneurship Centre along Ngong Road in Nairobi, supporting up to 300 co-workers with free high-speed fibre internet connectivity of 150Mbps. The move forms part of Liquid Telecom Kenya’s drive to support businesses across Kenya with both internet and, now, software services too.



Nairobi Garage's Entrepreneurship Centre

To find out more about Liquid Telecom Innovation Partnerships visit: www.liquidtelecom.com

African Offices

Mauritius (Head Office)

5th Floor, Ebene Mews
57 Cybercity
Ebene
Tel: +230 466 7620
Fax: +230 467 8263

Botswana

2nd Floor, Unit 6A
Grand Union Building
Plot 54374,
New CBD, Gaborone
Tel: +267 391 8533

DRC

Immeuble Crown Tower, 3098,
Avenue Batetela and Boulevard du 30 Juin
Kinshasa-Gombe
Tel: +243 99 23 33 494
+243 81 71 29 849

Kenya

Sameer Business Park, Block A
Mombasa Road
Nairobi
Tel: +254 20 5000 000
Fax: +254 20 5000 329

Lesotho

Kingsway Street
PO Box 1037
Maseru 100
Tel: +266 22 21 1000
Fax: +266 22 21 1178

Rwanda

Avenue De L'Armee
KN 67 ST #3
P.O.Box 6098
Kigali
Tel: +250 252 503 571

South Africa

401 Old Pretoria Road
Midrand 1685
Johannesburg
Tel: +27 11 585 0000

Tanzania (Raha)

9th Floor, I.T. Plaza
Ohio Street/Garden Avenue
Dar es Salaam
Tel: +255 22 2125230

Uganda

Plot 26, Wampewo Avenue
Bakwanye House, PO Box 8373
Kampala
Tel: +256 20 240 1100 / +256 41 456 2800
Fax: +256 41 434 2192

Zambia

Elunda 2
Addis Ababa Roundabout
Rhodes Park
Lusaka
Tel: +260 211 374 600 / 260 211 374 605
Fax: +260 211 374 622

Zambia (Hai)

Pangea Office Park
Office Number 2,
Arcades Off,
Great East Road Lusaka
Tel: +260 211 255 037
+260 211 255 038

Zimbabwe

4th & 5th Floors, ZBLife Towers
77 Jason Moyo Avenue
Harare
Tel: +263 8677 030 000

Zimbabwe (ZOL)

New Office Park
Block C
Sam Levy Village
Harare
Tel: +263 8677 177 177

Rest of the world

United Kingdom

6 New Street Square
London EC4A 3BF
Tel: +44 20 7101 6100 / +44 20 7101 6200

United Arab Emirates

Dubai Distribution Centre RA08FH01
Jebel Ali Freezone North (JAFZA)
Dubai
Tel: +971 042 865 866

Liquid Telecom Group companies: