

**HEALTH &
HEALTHCARE IN
A DIGITALISED
FUTURE**

BCX

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‘Healthcare has a new best friend... technology. For the last 5 years, technology has been the main catalyst for change within the healthcare industry and has directly improved both the patient and provider experience. From remote monitoring devices to Apple HealthKit, electronic medical records to glucose monitoring contact lenses, technology has played the leading role in creating a new Digital Health ecosystem.’
KPMG May 2015

Tech will unquestionably help change the face of healthcare in the years to come and enable many of us to become healthier and more health smart. The Millennials (born 1980 to 2000) and generation Y (born 2000 onwards) can clearly see the value and applications of this tech and are eager to embrace it.

“I think like there should be a health app that will tell you what you do if say blood pressure or your heart rate goes up... like it will tell you to go the doctor or just tell you to take something...” Kirsty 17

“I see smart devices monitoring the steps you take, your heart rate, your blood pressure – I see it’s happening already. It’s a way to help you keep healthier and live longer...” Mbali 17

These are two of many such quotes to emerge from BCX’s recent research amongst the Millennials and Generation Y. The purpose behind this research was to find out how these generations viewed their future and the impact they believed the world of digitalisation would have on it. They are the face of the future and they have high expectations. The question is, is the health care industry in South Africa prepared and able to embrace and put this new tech to good use?

The Millennials and Generation Y

Let’s have a look at these generations a little more carefully. All generations have characteristics that define them as different to all preceding generations. The catch here is that the differences that identify these two generations are marked and game changing; think Mark Zuckerberg (Facebook), Kevin Systrom and Mike Krieger (Instagram), David Karp (Tumblr) – all under 35 years old. Just wait until the Generation Y’s start making themselves felt!

The Millennial generation was born into a world of technology. They interact with the world in a completely different way to their parents or grandparents. They are the ‘digital first’ generation and have grown up with computers, email, mobile phones, and the Internet as an integral and accepted part of their everyday life. Following on from their footsteps is generation Y (born 2000 onwards). They share many of the tech-focused characteristics of millennials, but they’re much more pronounced. While millennials may still remember the early stages of the Internet and cell phones, Gen Z will not remember a time before the iPhone or Facebook. Some defining characteristics of these two generations:

- **They are 'always-on'** - connected in some way with some device and at ease with tech.
- **They are multi-channel** - they can split their attention between their phones, TV, games, computers
- **They are knowledge driven** - they have knowledge at their fingertips and they use it.
- **They are socially and environmentally conscious** - they care about the World and what's on it.
- **They live in a virtual world, an augmented world where everything is possible** - boundaries no longer are.

Tech Requirements and Applications

Now, what about the advances that are driving the tech world? Let's go back to KPMG's, Kirsty's and Mballi's statements and unbundle what they said in terms of what technology is required to achieve their visions: smart apps, big data, cloud computing, mobility, M2M & IoT, Seamless Connectivity, Unified Communications & Collaboration and more. The connectivity, integration, application and management of all these divergent technologies is a real challenge for any organisation going forward. It's all new territory and ground breaking.

Here are some future scenarios which will manifest in the not too distant future:

- When visiting your GP or any medical professional, instead of having to describe your symptoms and give any medical history, the Doctor will already have this information and may even already have arrived at a diagnosis.
- Then there's medical and health diagnosis via one's eye's (iridology). You would simply take a picture of your eye and send this (via the net) to a facility for analysis and diagnosis.
- The other powerful use of communications technology is through crowd sourcing. A patient's symptoms, vitals and medical history is put up in forums for multiple input and diagnosis.

These scenarios are really not far off as we can see just by looking at what three tech giants are currently developing in conjunction with the healthcare industry:

Accessing a patient's electronic health record and broadcasting it to Google Glass, for example, allows a clinician to view patient data, including lab data and vital signs, without the need to divert away to a computer.

Linking a patient's personal health data recorded on a wearable device to an electronic patient record (epr) in a clinic/hospital setting. Apple is working with a number of suppliers towards transferring data between Apple's Health Kit platform and the epr. Medical professionals could use the 'right data' to detect patient warning signs more easily and prevent diseases and complications before they worsen rather than reacting to them after they occur.

Intel's funded partnership with the Michael J Fox Foundation to research into improving the monitoring of Parkinson's disease. Through the use of wearable technology, patient data is collected to measure symptoms and track the disease's progression. Data collected from patients, for example, following a new therapy routine or taking new medication and the effects this has on movement frequency may lead to further insights into the disease.

The applications and solutions are potentially endless but how do health care practices/organisations go about achieving this kind of digitalisation integration without having to deal with multiple vendors and the inherent problems of integration and communication that come with it? It's a very real challenge.

How Millennials and Generation Y see the Future of Healthcare

Finally, to give you a flavour of what this new generation of consumer thinks about the future of health and health care, have a look at this small selection of quotes from BCX's recently qualitative research. These youngsters are aged between 11 – 18 years old and come from LSM groups 5 – 10. They've got a pretty good handle on what to expect.

"I think smart devices will measure things like your heart rate and things and alert you if something's wrong, it's like better than going to Dr's where you always end up waiting a long time..."Katherine 16.

"Hopefully we have proper service delivery in the future so we don't have patients waiting to get help in long queues and waiting for medication..."Josh 16

"I really trust my phone, I would use it to monitor and manage my health and only go to the Dr if I really needed to..."Lerato 17

"using my smart phone to manage my health is something I'd like because it's like having a second opinion rather than having to go to a Dr or hospital ...Lethabo 18

About BCX

BCX is one of Africa's leading premier ICT solutions and service provider with the technology, capability and skills to deliver end-to-end digital solutions for large and medium enterprises in the public and private sectors. BCX leads with an unrivalled ICT solutions embedded on the foundation of unmatched Data Centre and Network Infrastructure and include world class solutions in ICT consulting and digital readiness assessments; a complete range of managed solutions that include both LAN and WAN; unified communications and connectivity solutions. In addition, cloud computing technologies underpinned by best in class security solutions and a host of value added services that include enterprise mobility services and analytics software with a specialised competency in the IOT (Internet of Things) and big data solutions.

BCX is a leader in Service excellence and boasts the largest pool of ICT skills in Africa, unparalleled geographic reach and points of network presence across the continent. Our strategic vendor relationships with leading multinationals enable BCX to deliver best in class solutions across industry verticals with skills and expertise seamlessly deliver integrated services to our customers. BCX is committed to providing ICT solutions that reduce the cost of doing business, increase overall business productivity and empower businesses to use technology as a competitive advantage.

Migrate your business into the digital future – contact thoughtleader@bcx.co.za

