

PwC focus on Education

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The nature of education is rapidly changing – not only in how it is delivered but also the role of universities in society.

Universities staying relevant in the Fourth Industrial revolution

Roshan Ramdhany, Education Industry Leader, PwC Southern Africa



Roshan Ramdhany

The pace of change is accelerating. Competition for the right talent is fierce. And ‘talent’ no longer means what it did ten years ago; many of the roles, skills and job titles of tomorrow are unknown to us today. How can organisations prepare for a future that few of us can define? How will your talent needs change? How can you attract, keep and motivate the people you need? And what does all of this mean for Universities and HR?

This isn’t a time to sit back and wait for events to unfold. To be prepared for the future one has to understand it. In this article we look in detail at how the workplace might be shaped over the coming decade.

These are some of the questions from PwC’s paper titled ‘Workforce of the future – competing forces shaping 2030’ released recently. The future of work asks us to consider what influence the continuing march of technology, automation and artificial intelligence (AI) will have on where we work and how we work. Will we need to work at all? What is our place in an automated world?

Many commentators focus on technology and the role that automation is predicted to have on jobs and the workplace. We believe the real story is far more complicated. This is less about technological innovation and more about the manner in which humans decide to use that technology. The shape that the workforce of the future takes will be the result of complex, changing and competing forces.

The megatrends are the tremendous forces reshaping society and, with it, the world of work: the economic shifts that are redistributing power, wealth, competition and opportunity around the globe, the disruptive innovations, radical thinking, new business models and resource scarcity are impacting every sector, and education is no exception. How humans respond to the challenges and opportunities that the megatrends bring will determine the worlds in which the future of work plays out.

The future of jobs and drivers of change

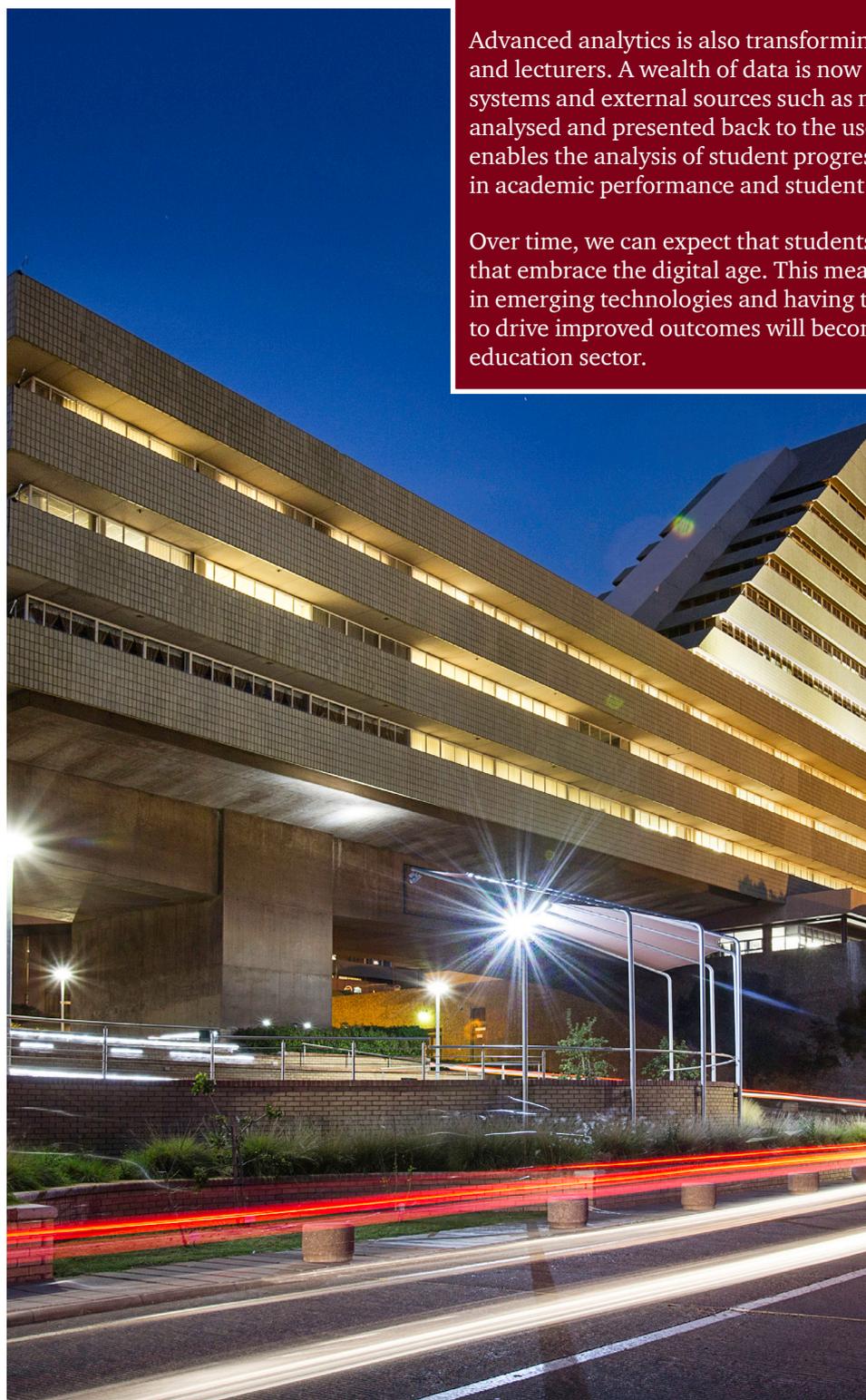
The Fourth Industrial Revolution will interact with a range of additional socio-economic and demographic factors affecting our country, resulting in major disruptions to labour markets, growth in wholly new occupations, new ways of organising and coordinating work, new skills requirements in all jobs and new tools to augment workers’ capabilities.

According to the World Economic Forum’s Future of Jobs report, the top five drivers of change in South Africa from 2015 to 2020 include: big data, the changing nature of work / flexible work, the middle class in emerging markets, mobile internet/cloud technology and geopolitical volatility.

What is likely to be the jobs impact of these changes?

In addition, while jobs are declining, remaining stable or growing, they are also going through major changes. The World Economic Forum’s Future of Jobs analysis found that, just in South Africa alone, 39% of core skills required across all occupations will be different by 2020 as compared to what was needed to perform those roles in 2015.

New and emerging technologies such as smart mobile phones, wearable devices and sensors, cloud-based IT, advanced analytics and the Internet of Things are changing business and operating models across all sectors, including higher education. These technologies present new opportunities to improve or redefine the university experience through activities including teaching and learning, research and working on complex projects with other universities and partner organisations. New ideas can also be tried out with minimum upfront investment.



Get your skills in order: adapting to survive

The new requirement for universities is to be able to track the skills demands within the industry and move quickly to make sure that students leave their education ready to add real value to businesses worldwide.

The skills needed for the future are not just about science and technology. Human skills like creativity, leadership and empathy will be in demand.

As the 'typical' linear career path ceases to exist, perceptions of the value of the new norm of a 'portfolio career' must change. Time does much to shift thinking, but incentives are needed too.

Although, according to a paper by the WEF, countries like South Africa and Kenya have a somewhat higher capacity to adapt, urgent reskilling and upskilling efforts are needed, focusing in particular on strengthening higher education and adult learning.

Advanced analytics is also transforming what universities can do for students and lecturers. A wealth of data is now being collected from a range of internal systems and external sources such as mobile and wearable devices that can be analysed and presented back to the user in a highly interactive manner. It also enables the analysis of student progression patterns, identification of pitfalls in academic performance and student throughput in an integrated manner.

Over time, we can expect that students will be attracted to those universities that embrace the digital age. This means that being aware of new trends in emerging technologies and having the ability to harness their potential to drive improved outcomes will become a key differentiator within the education sector.

Future-ready strategies

The current spread of education and skills across generations and the expected future trajectory of jobs point to particular strategies for the region to ensure that it is prepared for the labour markets of the future.

Recent World Economic Forum research on Realizing Human Potential in the Fourth Industrial Revolution, developed through in-depth consultation with leading experts and practitioners, recommends a number of levers for creating stronger education systems, including: 1) expanded access to early-childhood education; 2) ensuring the 'future-readiness' of curricula; 3) investing in developing and maintaining a professionalised teaching workforce; 4) early exposure to the workplace and career guidance; 5) investing in digital fluency and ICT literacy skills; 6) providing robust and respected technical and vocational education and training (TVET); 7) creating a culture of lifelong learning; and 8) openness to education innovation.

All eight areas apply to the African region, which must ensure that access is universal, that leadership of reforms is drawn from multiple sectors and that

new education systems are designed for the long term, while maintaining the agility to cope with the constant pace of change.

There are four particular areas for strategic focus: ensuring the 'future-readiness' of curricula, especially through a focus on STEM fields; investing in digital fluency and ICT literacy skills; providing robust and respected technical and vocational education and training (TVET); and creating a culture of lifelong learning, including the provision of adult training and upskilling infrastructure.

In addition to the factors listed above, another inhibitor of digital uptake in universities is digital literacy. Academics and staff can be sceptical of using tools in which they lack confidence and may be reluctant to engage in digital spaces where they feel at a disadvantage to students who have grown up around technology. Ultimately, universities have the responsibility to embrace technology, particularly when teaching, to ensure students are getting the most from new technology.

Building the best future, together

The PwC paper 'Does the future add up?' names four key recommendations that institutions should consider regarding building the best future:

Higher education is in a new era with increased accountability around outcomes, particularly the view that a university prepares graduates for a job. This new era requires a new playbook for leadership.

1. *Be honest and build awareness*
2. *Develop realistic and detailed planning*
3. *Demonstrate strong leadership*
4. *Engage widely and holistically.*

The modern university has to play a number of different roles, but must also have a well-defined focus that sets it apart from peers. Finding the right balance is the key to success. Approaching change in a proactive and positive manner will ensure success.

“As individuals – actual human beings – what do we need to do to thrive and prosper in whatever the new world brings? The secret for a bright future seems to me to lie in flexibility and in the ability to reinvest yourself. If you believe that the future lies in STEM skills and that interest you, train for that. But be prepared to rethink if the world doesn't need so many programmers. If you are a great accountant who has prospered by building strong client relationships, think how you can apply that capability, without necessarily having to be an accountant. Think about yourself as a bundle of skills and capabilities, not a defined role or profession.”

Jon Williams
Joint Global Leader,
People and Organisation, PwC

Contact:

Roshan Ramdhany

PwC Education Leader

Office: + 27 (11) 797 4144

Email: roshan.ramdhany@pwc.com

Dayalan Govender:

PwC Advisory Partner

Office: +27 (11) 797 4846

Email: dayalan.govender@pwc.com

Yash Govender

PwC Advisory Senior Manager

Office: +27 (11) 287 0867

Email: yash.govender@pwc.com



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