

IBM fosters digital skills in Africa

IBM is investing \$70 million in building digital, cloud and cognitive information technology (IT) skills to help support a twenty-first century workforce in Africa.

The initiative, IBM Digital – Nation Africa, includes a cloud-based learning platform designed to provide free skill development programs for up to 25 million African young people over five years. It is part of IBM's global push to build the next generation of skills needed for "new collar" careers. "New collar" is used by IBM to describe new kinds of careers that do not always require a first degree but rather skills in cyber security, data science, artificial intelligence and the cloud.

IBM Digital – Nation Africa is designed to help to raise overall digital literacy, increase the number of skilled developers able to tap into cognitive engines and enable entrepreneurs and would-be entrepreneurs to grow businesses around the new solutions.

Through a free, cloud-based online learning environment delivered on the IBM Bluemix cloud platform for business, the initiative will provide a range of programs from basic IT literacy to advanced IT skills including social engagement, digital privacy and cyber protection.

Advanced users will be able to explore career-orientated IT topics including programming, cyber security and data science, as well as business skills like critical thinking, innovation and entrepreneurship. The initiative aims to empower African citizens, entrepreneurs and communities with the knowledge and tools to design, develop and launch their own digital solutions.

With the aim of equipping as many as 25 million people with IT skills over the next five years, the program will be launched from IBM's regional offices in South Africa, Kenya, Nigeria, Morocco and Egypt. This will enable the expansion of the initiative across the continent.

Africa has approximately 200 million people between the ages of 15 and 24. By 2040, the continent is expected to be home to the world's largest labor force, with an estimated working-age population of 1 billion. Yet many African companies cite a local skills gap as one of the major bottlenecks to growth. In South Africa alone, where more than a quarter of the workforce is unemployed, businesses struggle to find appropriate skills, particularly in IT.

"IBM sees effective, high-quality IT education as a key driver of economic vitality in Africa. Through access to open standards, best practices, IBM tools and course materials, the broad scope of this initiative will enable vital skills development," said Hamilton Ratshefola, General Manager for IBM South Africa. "In order to find solutions to Africa's challenges, industries across the spectrum need to enable the existing and future workforce to perform at the forefront of technologies such as cognitive and cloud computing. This will be the key to spurring economic growth."

IBM Digital – Nation Africa will provide access to thousands of resources in English, free of charge, including ready-to-use mobile apps, web guides, demonstrations, interactive simulations, video series and articles. It will include a range of self-assessment tests, together with industry recognized "open badges" aligned to digital competencies. The badges can then be shared with prospective employers.

A volunteer program will support and promote digital literacy within communities. There will also be an app marketplace – a platform on which new applications can either be made freely available or sold.

The initiative will be supported by the United Nations Development Program (UNDP), which has a special focus on fostering market-driven ICT skills in Africa and the Middle East. IBM will collaborate with UNDP on opportunities for STEM (science, technology, engineering and

mathematics) skills delivery, certification and accreditation. UNDP will work with its network of existing government partnerships to extend the program throughout Africa.

UNDP's 2015 human development report highlighted that technology is affecting the nature of work by introducing new ways of communicating, new products and new demands for skills. New technologies are also reinforcing and deepening previous trends in economic globalization, bringing workers and businesses into a global network through outsourcing and global value chains.

"These processes are reshaping work and testing national and international policies. In an attempt to address this global challenge here in South Africa, as well as in other priority countries in Africa, UNDP is pleased to leverage its global presence, development knowledge and long-standing partnerships to provide context, traction and scale to this collaboration with IBM," said Walid Badawi, UNDP Director in South Africa.

IBM has a direct presence in 24 African countries and has made several significant investments on the continent in recent years, including offices, innovation centers and other advanced facilities. The company has a research laboratory in Nairobi, Kenya, and opened a second research facility in Johannesburg, South Africa, in 2016.

In 2015, IBM rolled out a major initiative to expand its Africa technical academy and Africa university program, providing advanced skills in cloud, analytics and Big Data technologies, reaching more than 150 academic institutions on the continent. In 2016, a memorandum of understanding was signed between the Moroccan Government and IBM Morocco for the launch of a P-Tech program (pathways in technology, early college and high school). The company is also working with dozens of start-ups in South Africa.

Meanwhile, CDC Group plc, University Ventures and Savannah have announced that they will invest a combined \$12 million in UNICAF, a company dedicated to making international standard higher education accessible to people in Africa. The money will support the roll-out of UNICAF's higher education learning centers across African cities, including finalizing the establishment of a university campus in Malawi.

Founded in 2012, UNICAF both partners western universities and offers its own locally accredited degrees to African young people who are looking to study largely online while continuing to work. UNICAF has grown to more than 8,000 students today, and is on track to reach over 60,000 students by the end of 2020.

UNICAF has innovated to bring down the fee paid for these degrees to approximately 20 percent of the price paid in the West for the same degrees. The average price for a master's degree of \$4,000 still represents a significant investment for an African working person. However, this is a fraction of the price that would be paid at equivalent universities in Africa, and with a flexibility that enables students to continue to work while they study, so making affordability less of an issue.

CDC is the UK's development finance institution. It invests in businesses in Africa and South Asia to help to create jobs and make a lasting difference to people living in the poorest parts of the world. Education is one of CDC's priority sectors because of the jobs created, but also because of the impact on individuals' life chances, and the multiplier effect of having a skilled workforce.

David Easton, CDC Investment Manager, said: "UNICAF has the potential to transform African higher education, offering international-quality degrees at a price and flexibility not currently seen in sub-Saharan Africa. CDC's investment will help UNICAF to create more than 1,000 new jobs by building a network of learning centers and university campuses across African cities, including in the continent's hardest-to-reach countries."

University Ventures is an investment firm focused exclusively on the global higher education sector. By partnering top universities and colleges and then strategically directing private capital to develop innovative programs of exceptional quality that address major economic and social needs, UV is setting new standards for student outcomes and advancing the development of the next generation of colleges and universities on a global scale.

Savannah Fund is an African-based early-stage venture capital firm based in Nairobi, Kenya.

Program seeks to bridge industrial maintenance skills gap

The Houston County Career Academy (HCCA), Central Georgia Technical College (CGTC) and PepsiCo's Frito-Lay division have expanded opportunities for students throughout Houston County, Georgia, USA, by introducing an industrial maintenance program.

The program – a first for Houston County and potential model for other areas around the USA – connects students with technical training and employment opportunities in the community.

"This is an exciting opportunity for our students and community," said Sabrina Phelps, HCCA Principal. "Our district is thrilled to work with Frito-Lay and CGTC to grow our own workforce by aligning our students' training with industry needs. This workforce-development effort with Frito-Lay and CGTC will meet local employment needs and also be a model for the state and nation."

In Houston County and throughout Central Georgia, demand for industrial maintenance mechanics is high. At the same time, the area faces a shortage of highly skilled workers. Across the USA, almost three-and-a-half million manufacturing jobs are likely to be needed in the next decade and two million manufacturing jobs are expected to go unfilled through skill shortages.

"At Frito-Lay, our business – and the way we do business – continues to transform. Ensuring we have highly skilled, qualified mechanics in place to manage the technical aspects of our operations is critical," said Gregg Roden, Senior Vice-President of supply chain at Frito-Lay. "Innovative staffing solutions like the HCCA industrial maintenance program will help to ensure we have a pipeline of talent to fill high-technology roles now and in the future, while giving students a career path to ensure their future success."

Through the HCCA industrial maintenance program, students will receive elective high school credits, as well as college credits from CGTC for learning basic engineering and maintenance skills. These skills will prepare students for entry-level employment in manufacturing roles upon leaving high school. This includes an opportunity to:

- train with industrial mechanics;
- learn how to repair, troubleshoot and maintain automated equipment; and
- obtain hands-on experience in hydraulics, machine alignment, electricity and mechanical fundamentals.

On completion of the program, students will be eligible to interview for Frito-Lay's apprenticeship program, which pairs entry-level employees with mentors at Frito-Lay's Perry, Georgia, facility for on-the-job training while they work to complete their degrees.

Communication breakdown on apprenticeships

School-leavers could be missing out on apprenticeship opportunities because of a communication breakdown on careers information.

Research among 16- to 18-year-olds by UK employer Prudential shows that 47 percent admit to not knowing about apprenticeship opportunities and 61 percent do not know which employers offer apprenticeships.

Many are put off by the belief that apprenticeships are focused on manual labor and that opportunities for girls are limited to supposedly "traditional" female careers. Almost half believe most apprenticeships involve manual labor and 53 percent believe opportunities for girls are mainly in nursing, health and beauty and child care.

The research highlights changing school-leaver attitudes on apprenticeships as an alternative to university. Around 46 percent disagree that apprenticeships should be seen as the second best to university while one in three disagree that attending university is more likely to mean career success. But a communication problem persists, as more than a quarter of students in the study say that either the information on apprenticeships they received was poor or that they received no information at all.

Simon Moffatt, Human Resources Director at Prudential's UK insurance business, said: "The message on the wide range of opportunities available, with more than 1,500 job roles across

a range of 170 industries on offer, is not getting through. Too many school-leavers are still not aware of the full range of career options available.”

Prudential’s 2017 apprenticeship program, which will create opportunities for up to 22 young people who will be paid the national living wage, is the latest stage of the company’s £4.1 million investment in its scheme over a four-year period.

The research also revealed many positive findings, with almost a third of students aged 16-18 having considered taking an apprenticeship instead of their chosen career path. Of those who had taken an apprenticeship the most common reasons were: that the practical skills and work experience would be more valuable than going to university or into full-time employment (60 percent); the desire to earn money while studying (12 percent); and the concern that getting a degree would not necessarily lead to getting a good job (8 percent).

The Prudential apprenticeship program aims to arm young people with the qualifications, knowledge and life skills needed to embark on a successful career in whichever field they choose. The program offers placements in a wide range of roles in the company, including IT, human resources, customer services, operations, sales support, distribution, financial planning and marketing. Positions are available at Prudential’s London, Reading and Stirling offices.

To date, Prudential has recruited more than 178 young people to its work-based training program, which gives all apprentices the opportunity to achieve a recognized vocational qualification as well as gaining important work-based skills. It is based on a 13-month training contract.

Employers voice concerns over apprenticeship levy

Manufacturers have reservations about the viability and longer-term sustainability of the apprenticeship levy, according to a report from EEF, the manufacturers’ organization, and Lloyds Bank Commercial Banking.

Over a third of manufacturers (34 percent) claim to see no benefits to the scheme. A quarter of firms (26 percent) think the levy will increase the quality of apprenticeships, while 26 percent think it could serve to attract more young people into apprenticeships.

With companies keen to get skills and training that will help them to meet their productivity and growth targets, firms welcome the fact that the levy will help to put them in the driving seat. A quarter of companies (26 percent) say it will increase the responsiveness of providers to deliver relevant training, while three in ten (29 percent) say they will be better able to buy the training their business needs.

Despite these positives firms are worried about the cost (61 percent), the timescale for implementation (50 percent) and uncertainty about future rule and rate changes (44 percent). The current funding rules and rates only apply for the year ahead.

The biggest concern is about the value firms will be able to extract from the scheme. Three-quarters of manufacturers worry that they will not get back what they put in – and with good cause, according to the report.

It says that the complexity of the connected companies rule will see many more firms, including small and medium-size businesses, forced to pay the levy, but not all will be eligible for the levy’s allowance. At the same time, firms operating across the UK with employees in Scotland, Wales or Northern Ireland will also lose out on funding because of an incompatibility between the levy and the UK’s devolved skills policy. They will only get back the “English fraction” of what they have paid in.

The report urges the government to commit to an independent employer-led review of the implementation of the levy by the end of 2018 in order to tackle these and any other outstanding concerns.

Terry Scuoler, EEF Chief Executive, said: “Despite much hard work and dialog with Government, we are on the cusp of a policy roll-out that continues to cause manufacturers great concern. Clearly the apprenticeship levy has the potential to bring benefits, but not enough to outweigh our

sector's reservations. With skills such a high priority these fears are entirely understandable and must be swiftly addressed."

Dave Atkinson, UK Head of Manufacturing at Lloyds Bank Commercial Banking, said: "Apprenticeships have a vital role to play in securing the skills businesses need to drive productivity and growth while also ensuring young people are given every opportunity to develop a fulfilling and rewarding career. Manufacturers are firmly behind this and have a long track record of providing high-quality apprenticeship opportunities that lead to long-term careers, very often with the same employer. It is important that the apprenticeship levy builds on this by supporting manufacturers' training ambitions and acting as an enabler so that many more feel able to offer these valuable and aspirational roles."

RSA apprentices claim success

Two young apprentices from global insurer RSA are championing the benefits of being able to earn a wage while gaining practical on-the-job training combined with study.

Andy Briggs, aged 19, is a claims handler with a financial services apprenticeship based at RSA's office in Halifax, West Yorkshire, England. He secured his apprenticeship after starting at university and realizing that a degree course was not for him. "The apprenticeship has enabled me to earn while I learn and that is very appealing," he commented. "Not only am I getting paid to develop myself, but also I am building my skill base for the future – skills that I can use in other roles."

Jessica Feldman, aged 18, is also a claims handler. The apprenticeship route appealed to her as it enabled her to become more independent. She acknowledges the discipline needed to work and to study ensuring a good balance of her time for both.

"I would advise anyone who wasn't 100 percent sure about going to university to consider an apprenticeship, as you are building a strong foundation of qualifications and experience – both at the same time," she explained. "Do not go to university just because your parents want you to. I have been amazed at the support you get in the workplace where everyone wants you to succeed."

Ian Currie, UK Motor and Injury Claims Director at RSA, said: "All our apprentices are progressing well. They have started to build up the technical knowledge and operational skills aimed at enabling them to support our customers directly. It is great to hear that the apprentices are enjoying their experience and we have received good feedback on their performance and progression from line managers and mentors. We expect them to take up various operational roles across our claims function and will work with them over the course of the program to identify the best opportunities. We see the apprentices as key to our talent strategy and expect them to contribute to the success of RSA through continuing with their professional development with us."

RSA has employed apprentices for more than four years throughout its UK offices and has won an industry award. In 2015, the company was shortlisted for *Insurance Times* apprenticeship scheme of the year. Beth McNeil won apprentice of the year.

Kaplan is a provider of financial apprenticeships in the UK and works with RSA to recruit and train apprentices.

Elizabeth Edwards, from Kaplan, said: "From the creation of its apprenticeship program, the whole team at RSA has fully embraced the idea of apprenticeships and has created a fantastic, valuable experience for apprentices."

Survey highlights popularity of apprenticeships

Almost half of businesses say apprenticeships provide a good way to get people into their industry, while more than a quarter say apprentices are necessary to help their business to grow.

Of 2,200 jobseekers surveyed, 36 percent would consider an apprenticeship and 49 percent would consider a degree apprenticeship in next five years. Some 34 percent of jobseekers would choose an apprenticeship over going to university.

Almost a third of businesses say they plan to take on more apprentices than in previous years. Only 9 percent are taking on fewer.

John Salt, Director, totaljobs, which commissioned the research, said: “Apprenticeships have long been recognized as a key way to develop the skills needed by employers and the Government has stated its intention to have three million apprentices in the workplace by 2020.”

He continued: “We are seeing increasing evidence that employers are acutely concerned by widening skills gaps throughout their organizations and their wider industries. Growing talent among the next generation, and helping people to transition their skills into new careers through apprenticeships, is one way we can lay a strong foundation for ongoing jobs growth.”

Anouska Ramsay, Talent Director at Capgemini UK, a provider of consulting, technology and outsourcing services, commented: “As people today tend to have multiple careers, apprenticeships are no longer confined to school-leavers. The opportunity is now there for those at any stage in their career to realize their strengths and reskill in a new direction. This includes enabling those within our organization, those moving jobs and those re-entering the workforce, such as women returning from maternity leave wanting to pick up the digital skills that are increasingly in demand in today’s workplace.”