

RE-TOOLING WORKPLACES FOR THE FOURTH INDUSTRIAL REVOLUTION IN UGANDA

The tortoise is neither lazy nor lacking in understanding. It just lacks the vehicle, the means to get to its destination in time. These were the words of Naomi (not real name), a psychologist, working as a human resources manager (HR) in an institution I once worked for. Naomi was referring to my supervisee Savvy (not real name), who had difficulty in meeting deadlines and coping with pressure in the workplace. He was the best in analytics but the worst in timeliness! My decision was to terminate Savvy. However, Naomi insisted on examining Savvy more intently and probably re-tool his work for efficiency. Naomi reasoned that completing college or university is a clear indicator that someone can accomplish success in the workplace if specific tasks are given and clear timelines are provided, and Savvy was no exception. I relented as advised, waiting to see if there will be any positive change with the HR's intervention. It can even help when you wanna refine ur slang or formality level. That's especially useful when writing for a broad audience ranging from businessmen to friends and family, don't you think? It'll inspect your vocabulary carefully and suggest the best word to make sure you don't have to analyze your writing too much.

By the end of two weeks, Naomi brought to me a report of impediments to Savvy's performance. Savvy was lagging behind because of outdated systems and software in the data management department. He had resorted to manual data entries and tedious analyses. Being a perfectionist, he spent valuable time on a few entries, counting, categorizing and recording with care, while falling out on timeliness! Naomi assured me that once the company adopted an artificially intelligent software to aid unsupervised learning, Savvy would yield the desired timely, quality results without stress and burnout. When this recommendation was actioned, it turned out that there was no tortoise in Savvy but a bullet!

A Virtual Reality experience



Savvy is just an example of what institutions and companies in sub-Saharan are facing in the era of the fourth industrial revolution (4IR).

An increasingly busy and aging workforce, armed with archaic tools, expected to multitask, and perform as efficiently as the 'artificially intelligent' in the first world industries. Without AI and ML to fast pace productivity, it becomes almost impossible for Africa south of Sahara, to keep up with the 4IR.

The World Economic Forum for Africa 2019, calls African leaders to action; to harness the massive youth population, giant data, and digital opportunities for the 4IR and leapfrog ahead in Fintech, food tech, and safe and smart cities. Like the new Savvy, it requires re-tooling workplaces, individuals, homes with technologies and trends such as the Internet of Things (IoT), robotics, virtual reality (VR) and artificial intelligence (AI). The World Bank's Chief Economist for Africa Albert Zeufack once said: "digital transformation will create more jobs in Africa than it will destroy," but the key question is, can Africa be a central part of the technological revolution, or "will digital transformation be done without Africans?"

The answer to Albert Zeufack's question is yes, the world will undergo digital transformation with Africans participating in the technological revolution. The Ugandan Academy at the Infectious Diseases Institute (IDI), Makerere University in Uganda, is one the institutions in Africa, laboring to transform the health sector by harnessing AI, ML, robotic innovations and their innovators for sustainable health in resource limited settings.

At the Academy for Health Innovation (A4HI) at IDI, AI driven projects that aim at utilizing big data in health policy decisions, manage health products supply, improve health services delivery are underway.

Collaborations with the National Institutes of Health (NIH) and University of Cambridge, UK are exploring research topics ranging from scaling up virtual reality laboratories for training and research; AI applications to enable strong linkage of persons-infected with HIV (PLHIV) to treatment in remote settings; to delivering anti-retroviral therapy to PLHIV in hard to reach places. Skilling of health workers and university clinical students in bioinformatics and emerging technologies, global health security and urbanization; big data warehousing and analytics is all happening at these Centre of Excellences in Makerere University of Uganda in 2019.

Like Savvy, there is no doubt that the Ugandan young population stands a chance in retaining her position as the world dashes to digitalize for the 4IR transformation and development.



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