

Is Africa “Overproducing” “Well Trained” Information Technologists? – Part 1

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INTRODUCTION

In my editorial article of the maiden issue, Vol. 1 Issue 1, Vol. 3 Issue 2 and in subsequent volumes I pointed out that the African technology journey from the bottom of the stack to where Africa is now, has not been without problems. There, at the dawn of the Information and Communications Technology (ICT), Africa’s technological imprints were but non-starters compared to the giant steps that were being taken in the rest of the world. Throughout the continent, ICT capacity and infrastructure were low and in some places non-existent, and equipment acquisition was sporadic and unplanned. However, as I pointed out then and stress now, Africans were just deprived not disabled. African leading universities and institutions set themselves on a quest to be the ICT incubators and jump start ICT education and research and build ICT capacity to help in the construction of the badly needed infrastructure.

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For these institutions and everybody else involved in the quest for technological advance, the climb to the top of the technological mountain has been and continues to be steep. However, with the typical African determination, they are inching on to the top. Years into the climb, there has been signs of achievements. Everywhere in Africa today, one witnesses exuberance, soaring interest, especially of the young, an increasing inventory of working ICT equipment, an increasing number of confident and young ICT technocrats, an unbelievably large number of young people taking courses in information technology and a growing number of governments believing more in ICT as a tool for development. The African technological acquisition, though still low by international standards, driven mostly by an unprecedented indigenous interest in technological development and the numerous and sometimes ambitious initiatives by NGOs and the donor community, is changing the fortunes of Africa, quickly leapfrogging her into the 21st Century with rapid development not seen in generations. The long awaited African technological dawn may be in sight.

But like all good and successful journeys, it is time to take a break and a breather and take stock of what is it that we are getting. Indeed the results we are getting, though still overwhelmingly good, there are signs that things are not going as planned. There are signs of cracks in the castles of success we are building. The first and probably the biggest crack to show is the growing numbers of university graduates in ICT that are roaming African streets looking for employment. This should lead us to serious soul searching for where we went wrong. **Is Africa “Overproducing” “Well Trained” Information Technologists?**

Why do we have what seems to be so many frustrated young ICT graduated that are roaming our streets with annoyed parents who spent their lives savings for a promise that was not to be? Did we oversell ICT? Did we false advertise ICT? Did we train their sons and daughters right? Have their governments failed to create enabling environments and infrastructures to enable these graduates to start on their own? Last and most important, did we misunderstand ICT? To try to understand what is going on and ignite a debate about this very growing problem, I put quotes of key words and phrases in my title question to indicate how loaded the question is.

As we start to debate the question looking for answers, I want to point out pertinent issues that may explain some of the root causes. I discussed these very same issues, on the cause of poor education given to our students, in Vol. 5 Issue 2:

- A PERVERSIVE CONSULTANCY CULTURE Today, intellectual life in universities has been reduced to bare-bones classroom activity. Extra-curricular seminars and workshops have migrated to hotels. Workshop attendance goes with transport allowances and per diem. All this is part of a larger process, the NGO-ization of the university. Academic papers have turned into corporate-style power point presentations. Academics read less and less. A chorus of buzz words have taken the place of lively debates (Mamdani, *Mail and Guardian Online*)
- Mahmood Mamdani: “African Universities Breed —Native Informers, Not Researchers” - A leading East African political scientist, Prof. Mahmood Mamdani, who is the director of Makerere University ‘s Institute of Social Research has put universities in Sub-Saharan Africa in the dock by accusing them of not creating researchers but churning out native informers to national and international non-governmental organizations. (Mamdani, *Mail and Guardian Online*)
- Statistics from the United Nations Educational Scientific and Cultural Organization (UNESCO) reveal that the entire African continent contributes only 2.3 per cent of the world ‘s researchers. (*Wachira Kigotho, online*)
- UNESCO estimates that on average, Africa has only 169 researchers per one million inhabitants. Apart from having the lowest density of researchers in the world, investment in research and development in Africa stands at 0.9 per cent. (*Stepps in Sync.*)

Besides underrated education given to our students as one of the root causes of this problem, there are other causes including:

- Lack of enough resources like private capital funding and bank loans to enable these graduates to start on their own- building start ups. The majority of technology-based businesses and companies start as individual start-ups.
- African governments are not investing enough into policies and financing of ICT-based enabling environments. There are a few exceptions like Kenya’s Konza Techno City, an

IT-focused “smart” metropolis – code named the Silicon Savannah (Jonathan Rosen).

- False advertising by institutions of higher learning. In the last 10 years or so more universities and institutions of higher learning have sprung up across Africa than in the last fifty years. The key getter is ICT. Everyone of these “new” institutions, some not worthy to be called institutions of higher learning, and with poorly trained and poorly paid teaching faculty, are advertising to parents as they offer a strong curriculum of ICT and how their sons and daughter will not have problems finding ICT-related jobs. Parents pull their money out of mattresses to pay for the success of their off-springs.
- Probably the most serious problem is the *misunderstanding* of what ICT is. I attended a conference where this one African minister tried to convince everyone that “with “ICTs” (whatever ICTs meant to him) we can do anything”. This has been and continues to be a very serious and indeed dangerous problem. ICT is a spectrum of technologies that if one is not careful, one can take courses and courses and come out without an iota of knowledge of even writing a single line of code to do anything useful. I have seen African students with degrees in ICT coming to American universities and not be able to pass a single undergraduate freshman course in computing sciences. It is a deplorable situation we are in. In this situation, how do you expect to graduate a student who can find a meaningful job?

Something needs to give!

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