

Knowledge Economy: Innovation, Creativity and Enterprise Development

Key Note Address Delivered At NCS ENUGU 2014 By

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Good Afternoon Ladies and Gentlemen.

My CEO, Mr Austin Okere regrets his inability to be here to deliver this address. For those of you who know him, he is not only CEO of CWG Plc he is also on the faculty of Columbia Business School as entrepreneur in residence. He has asked me to fill in for him. The words though are mine and the mistakes are mine. The theme of this conference and the topic I have been asked to look at are particularly interesting for me given that I have participated in several innovation initiatives and I currently lead CWG 2.0 initiative where we are working on the challenge of transforming CWG into a utility business.

Several years ago, an acquaintance of mine who was working in a bank lost his mother. In order to reduce costs, he and his siblings elected to travel to Maidugri to purchase the cows and rams that were to be used for the funeral rites. He found out that the costs of these animals in Maidugri were at a hefty discount to the market price in Lagos. After the funeral rites were done with, my friend decided to take advantage of the price arbitrage and go into the business of selling cows. His first trip was his last. By the time he brought a trailer load (or half trailer load , as many died on the way or escaped while feeding !) he discovered there were associations that required him to be a member before he could sell cows, that he needed license to slaughter the cows himself and that he could not just drive around town with a trailer load of cows. He could barely make half of his investment back. Long story short, he did not have the KNOWLEDGE of the business before venturing into it.

The morale of this story is that all economies has always favored the knowledgeable and punished the ignorant. The knowledge economy is therefore not an invention of the IT revolution. Knowledge has always been a critical and competitive success factor. The IT revolution of the 21st century has made it much more easier to acquire, to share and to find knowledge. It has also made it a lot easier to create a new kind of knowledge economy as we will illustrate with the stories below.

Everyone knows Tiger Woods. The great golfer. Until before his marital and injury troubles, Tiger was the greatest thing that had happened to golf. He had won all the majors American Open, Uk Open etc at a stretch. He had incredible drives and wonderful puts, destroying the competitive field with ease. If you have tried to play golf you will know how difficult it is to get that ball to go into the hole. For people

like me hitting the ball at all is an achievement. What most people did not know was that a lot of Tiger's initial dominance stemmed from his using a different type of golf ball. The construction of this golf ball gave it the characteristics that allowed both close control and long accurate drives. But this is not the interesting thing. The interesting thing was that the design of this ball was patented and the patent was held by Bridgestone which had less than 8% market share for golf balls in the US then. Eventually, the big manufacturer of golf balls Titleist reverse engineered this design and started making these balls available for everyone. This removed Tiger's competitive edge but infringed on Bridgestone's patent. You can guess what happened next. Bridgestone sued and won big. Titleist paid a royalty for every golf ball it sold.

Another story that will interest you is that Microsoft makes more money from Android than Google makes, and even more money than Microsoft makes from Windows Phone. You will also have heard that Samsung will pay Apple more than \$1b for patent infringement. Apple and Microsoft ganged up to purchase patents for \$billions from Nortel, Twitter bought from IBM, Google bought Motorola primarily for patents. The company ARM sells only patented IP.

If you are paying attention to these stories , you will notice that knowledge(now encapsulated in patents) is being traded as a good. So the new knowledge economy not only recognizes knowledge as a competitive weapon but has also created a situation where knowledge is not just a factor of production but also the product. Every economy is knowledge based and those with superior knowledge have always had a competitive advantage. That's how come the British were able to colonize us. Try roasting corn on the street without knowing the tricks or going into the auto spare parts business or bringing cows from Maidugri to Lagos. It is a fallacy to think that economic activity based on knowledge is a new thing because it is not. What is new is recognizing that knowledge is not just a factor of production but can also be treated as a good, the end product itself.

In this new knowledge economy we are now talking about codified knowledge, knowledge that is recognized as property that can be converted to capital. Knowledge in your head is useful to you but can hardly be converted to capital. It can hardly be protected. As de Soto pointed out in his book, the failure of capitalism in emerging countries is mainly due to the fact that we are unable to convert our property to capital. To build a knowledge economy we have to build knowledge that can be codified, registered as a property and converted to capital that can be traded or hoarded to generate competitive advantage.

That kind of knowledge is built around know-what, know-why, know-how and know-who. Know-what is about information, data, facts. You can only profit from having this information or facts when or if others do not have it or if you are able to generate insight that is not obvious to the next person or organization. It is an important input into generating know-how and know-why. It is the forte of statistics, analytics, big data and data collection. Just for instance , we know that there are 100m mobile

subscribers in Nigeria, there are 17m MSMEs in Nigeria etc, from these we can derive insight into solutions or services that can form the basis of new enterprises. This why the NSA is spying on everybody and the Chinese are hacking everybody. Without the facts, your enterprise is doomed. And we don't have enough facts in Nigeria. So we are not seeing the opportunities. Of course the NBS(National Bureau of Statistics) collects a lot of data but how easy is it to reach? How comprehensive. Yesterday, I was discussing with a marketing executive and we realized no one has record of all newspapers being published in Nigeria and the size of their readership. With all that the Ministry of Agriculture is doing, I bet there is little accurate and granular data about planting, cultivation, harvest, input costs, revenues, yields, rainfall patterns, market prices etc. Data in Nigeria is inferred, extrapolated or fabricated and only very occasionally actually collected, sanitized and made available for general use. If you needed the data, you will have to make your own investment to get the data.

Know how relates to skills and processes. It will surprise you how much enterprises are limited by lack of know how. Take for instance running a transport company - how do you price, how do you schedule vehicles, how do you manage it all? The difference between the companies that grow and sustain themselves is know how - know how generated, acquired and deployed. We Nigerians don't like theory but then know how is about developing and disseminating the theory of how things work the way they work. Building a car without knowing how it should work or arriving at some knowledge of how it will work will mean you will not be able to make cheap cars or produce reliable cars or the next generation of cars. Know how sometimes is gained from codifying experience. If you don't know how to effectively manage the logistics of distribution, you should not be in the business of running retail. Infact, if you do not know what guides the layout of aisles and shelves, you should not be in the retail business. And these days companies are patenting know how for instance Amazon patented done click purchase. Know how is in short supply in Nigeria. Not all know how is taught in conventional schools but rather in organizational training centres or in vertical industry training centres, As a result, we keep saying our graduates are unemployable!

Know why is knowing why things work the way they do, the laws of nature and how they apply or manifest. This is the realm of science, the realm of research and the realm of quality education. Know why gives us deeper knowledge that we can use to manipulate our physical world. When we know why we can explain know how and generate knowledge that can then become property and capital. It is important to point out that as much as know why depends on structured knowledge, a large part is due to intuition, serendipity and tinkering. Sometimes know why is derived from trying to make sense of know what. A large part of current know why is being generated from universities and from formal research organizations. Just a few questions, who knows why local rainmakers are able to make rain? or how the eggs in Ondo can cause a house to catch fire? Know -why.

Know who is about networking and dissemination of knowledge. Who knows what? This could be a critical advantage and for an emerging economy like ours will allow us to avoid reinventing the wheel. Our interpretation of this aspect of knowledge focuses too much on exploiting the benefits of who you know rather than on the requirements for sharing and disseminating knowledge. While we make strenuous efforts to socialize and network, we are not open to sharing knowledge.

So how does all these tie to creativity, innovation and entrepreneurship development? I am not sure myself. However if we see entrepreneurs as people who take the risk of starting businesses and who grow those businesses to become even bigger businesses, it is clear that that is only possible by deploying knowledge in the various forms discussed. Creativity and innovation deploy knowledge of all sorts to solve problems in new ways which the entrepreneur deploy to generate and sustain economic value. How does an entrepreneur use knowledge? First he uses know what to identify an opportunity or he can depend on gut instinct, he uses a lot of know how to define his unique offering, organize his firm, raise financing and combine this with know why to generate and regenerate the knowledge artifacts that give him and his business a sustainable competitive advantage. The entrepreneur usually seeks to upend the status quo, to succeed where others failed and to topple the leaders. He is the agent of creative destruction, creating new knowledge that overturns existing systems. The entrepreneurs that make a difference eventually create long lasting firms of considerable size.

In this respect therefore, entrepreneurship development will have to focus on building this body of knowledge and educating existing and would be entrepreneurs on the application of this knowledge and the knowledge creation process. Today, there is a lot of emphasis on business plans, incubators, venture capital which are all very important. So in Nigeria there is demoAfrica coming up, there are incubators being setup by government and private companies but , a big but, where is the knowledge going into it? We talk about apps and coding and hackatons and a lot of us seem to believe that great enterprises will come out of that. I doubt it. Just recently I was on a panel judging some startups and one of the contestants had the idea of building a system that uses mobile phones to provide information on farm input prices and market prices to farmers. Surprisingly he had no idea of the commodity exchange and the whole warehouse and exchange system being built around it. The significant know what in the area he is trying to get into was foreign to him. But this is just the tip of the iceberg. Why is there no Nigerian chain of super markets even though there are so many mom and pop shops? Why is there so few made in nigeria goods of any sort? I posit that our entrepreneurship development efforts are currently skewed away from real knowledge.

We need to challenge our selves on how much knowledge we are creating that can make us a knowledge economy. I will like to see big investments in creating knowledge - know what, know why, know how and know who. I will like us to educate our would be entrepreneurs on the value of knowledge and assist them to

seek it out and apply to their business or use as a basis for their business. I will like a concerted effort to build knowledge capital for the country if we plan to go anywhere. As at today you cannot patent software in Nigeria. In fact you can't patent anything that is not manufacturing related or equipment related.

Without making a concerted effort to put knowledge at the root of our entrepreneurship efforts, we risk high startup failure, unsustainable businesses that can hardly survive one generation and also small sized businesses that cannot seriously take on the world.

In conclusion, knowledge has always been the basis for competitive advantage. For us to unleash the entrepreneurial potentials in Nigeria we need to invest in creating knowledge, making our entrepreneurs recognize and take advantage of this knowledge. Information technology is making this a lot easier but it is just one of the developments that offer us the ability to leapfrog.

Thank You