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Thriving in Uncertainty: Disruptive Education and Adaptive Innovative Entrepreneurship

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Abstract

Nigeria and indeed Nigerians have found themselves at unique crossroads in the most fast-paced evolving periods in human history. A period faced with two giant strands of disruptions: Political dystopia and technological disruption. The first political situation has left the people severely estranged in acute disillusionment and utter desperation. Secondly, there is this raging wave of technological disruption closing in on jobs and disrupting the usual way of life, cultures and belief systems. With these two disruptive waves, Nigerians are caged in a precarious situation where there is a need for urgent remedy. Using a qualitative methodological research approach this paper offers two solutions for the two problems. One is a new form of education imbued in the type of education promoted through CRIS Academy (An academy in proposition). An education that prepares the student for the kind of future technology promises humanity. And for the second problem (political dystopia) the paper proposes a new model of development known as *individually Propelled Growth (IPG).* This paper recommends the setting up of special private schools in a controlled environment to be run by private institutions where this form of education can be test run. It also recommends that the IPG model of development be carved into the national curriculum of studies starting from primary education to tertiary.

Keywords: Political Dystopia, Technological Disruption, Individually Propelled Growth (**IPG**), Entrepreneurship, Disruptive Education.

Introduction

Humanity has found itself in the most uncertain of all times since its history. It has found itself in the most unprecedented times with the different changes in the realities of the world. The nature of time and evolution has changed in principle and effect. In the past, it took long periods for change to occur (several generations sometimes), but today a lot now happens in six months and one year. All of these are mainly attributable to the exponential growth of our modern technologies which are responsible for causing dramatic disruptions in different sectors of our lives. From education, energy, health/medicine,

transport, to government, culture, social life, economics, business, and sports. We are entering a time when the rate of growth in our technology will become so rapid and its effects so profound that we won't be able to catch up with its rate of acceleration and as it would appear our very own creation would increasingly threaten us.

From this part of the world (Nigeria) the level of uncertainty is even more profound as our peculiar situation compounds the whole issue for us. We have found ourselves in a double predicament, a double uncertainty. We are in an age of political uncertainty, of politicians who are dwarfed in the art of architecting the state and leaders who not only lack the vision, purpose and right influence but are equally moronically clueless in the art of leadership. We are in a time where the wave of anti-intellectualism among the citizenry is on a high and disregard for values of the common good, and common sense is encouraging mediocrity in every cadre of the social network. And so we are witnessing in Nigeria a vicious political disruption that has kept us in the loop of existential agony and despair. It is a disruption which I can descriptively summarise as simply a "political dystopia".

We find ourselves in an age of exponential growth in a techno-digital society caused by the rise in artificial intelligence, biotechnology and nanotechnology (GNR: Genetics, Nanotech, and Robotics) which is seen in the merger of the biotech revolution with the infotech revolution causing the most enormous unprecedented shift in not only the history of humankind but of life itself. A disruptive process that is determined by the massive automation, and digitisation of all the sectors of human society together with the shattering transformative trends of globalisation, innovation and growth which are causing challenging disruptions in every sector of human society. Therefore we have AI and biotech (GNR) leading the trends of digitisation, globalisation, innovation, growth and disruption.

We have found ourselves in an unusual negative political disruptive situation plus a technological disruption placing us in a unique period of uncertainty in our history. As a species, our exceptional characteristic strength that ensured our evolutionary survival from the African savannah to the different parts we have found ourselves in the world is the ability to ***sense,*** adapt and ***survive***. How then can we employ these unique strengths of ours in overcoming these very challenges that threaten us both

as a country and as a specie? It is the distinctive realistic issues posed by this challenging situation that forms the background and thrust of this paper.

A Political Dystopia (Political Disruption)

The existential situation in Nigeria is traumatic and vicious. With 87 million poor citizens Nigeria is currently the poverty capital of the world (Akinkuotu, 2018). With a generation capacity of 6803 MW and 55% of the population without access to grid-supplied electricity (Solar Plaza, 2018) it is the second worst after Yemen in electricity supply in the world. It has the most significant number of out-of-school children (over 10 million), with 54million illiterates and an illiteracy rate of 61% none of its universities ranks amongst the first 700th in the world. It has one of the lowest life expectancy rates in the world. And according to a study by the Economist Intelligence Unit, EIU has ranked Nigeria as the worst place for a baby born in 2013with a score of 4.74 out of 10, just below Kenya which scored 4.91 (Ezemalu, 2012).

The rate of hunger in Nigeria is very high. Nigeria is a material based consumerist economy that relies heavily on fazing crude oil. Olaoye, Ajilore, Akinluwade, Omole, Adetunji (2016) observed that Nigerians spent as at 2012 1.6 trillion naira yearly and 4.9 trillion naira as at the year 2018 ("Nigerians spend N4.9 trillion on generators annually to self-generate 14 gigawatts of electricity, RMI report", 2018) on generators and consumes 9 billion USD a year in inefficient fuel and so far the government has invested over 2 trillion naira in the power sector in the past 16 years yet it ranks as the second worst country in electricity only behind the war-stricken country of Yemen. The cost of governance in Nigeria is one of the highest in the world, yet it has the most unstable governments and weakest democracies in the world where the rule of law is severed from and subject to the national interest. A senator receives on average over 13.5million naira monthly (Busari, 2018) and over 160 million naira per year apart from their statutory allowance.

All of these problems have left the sociopolitical and economic situation in Nigeria unstable and unreliable. In addition to this, the process of running politics, governance and institutions have become crude, anachronistic, redundant and dysfunctional. From the very inception of this country, we have

been through many regimes and systems, and since the democratic process of the country, many administrations have tried and failed with many policies, programmes, and action plans. Blame it on poor leadership, bad will, ignorance, poor structure, ill-structured foundation or selfish ethnicity and clannishness or an acute combination of these factors the main issue is that the system has failed. It has proven time and time again to be dysfunctional, unreliable, unsustainable, unfeasible, and redundant. Therefore we need a new effective model.

Digital and Technological Disruption

Technology has always been throughout history as man's enabler, how man augments his abilities. Without technology, humans wouldn't have survived the evolutionary battle of natural selection. Homo sapiens are the most sophisticated tool-making animal that we can tell for now. Ever since the first man picked up a stick to reach a higher branch, humans have not stopped in their drive to build better tools to enhance their existence. And so technology has served continuously as the artificial enabler of man to thrive in his natural environment.

A research conducted on the efficiency of locomotion of all animal species, i.e. on the amount of energy they expended to get from point A to point B found out that of all the animals the condor was the most efficient in locomotion leaving humans far behind the list. But you give a human a tool, a bicycle and he gets to the top of the list. Steve jobs likened the computer as the bicycle of the mind. Human technological devices could be mental or material. It is mental or cognitive when it is seen in culture, religion, etc. and it is material when it is in physical tools as in phones, cars, etc.

Our technological tools (mental or material) have always disrupted us right from the time we became tool-making animals. At every stage we doubled down on our tools; it eased off some of the work we did and changed the way we lived. Sometimes it entailed changing our old habits and adopting new ones or gaining new traits or abilities altogether. In some extreme situations, it changed both our environment and our biology. This evidently, shows how powerful our technological tools can get that they can not only improve our world but us entirely. And as our cognitive abilities evolve and get even more complicated, our attendant technology that is shaped by our thinking and problems get even more sophisticated causing even more profound shifts and disruptions at a more outstanding scale.

Robots care for us as we grow old, while cyber attacks against our homes and extinct animals are brought back to life with technological advancements. Ubiquitous sensors eliminating privacy as we now know it, designer babies i.e. humans with specially selected enhanced traits by their parents, self-driving cars disrupting millions of truck drivers, intelligent AI diagnosing almost every kind of ailment, robotic surgeons that perform significant operations on the human body with the most exceptional ease, accuracy and efficiency, AI personal assistants that do almost everything for us from scheduling meetings, shopping and even voting in an election for us. These changes might appear as being both interestingly sci-fi and disorienting or even more than a little scary." But yet this is what our future will most likely look like.

The advent of technoscientific realities like artificial intelligence and biotechnology has also revolutionised the way we create and do things. It has seen the emergence of a massive wind of automation sweeping across all repetitive jobs done by humans. It is projected that 5 million jobs will be lost to technology by 2020. With the industrial revolution, we transcended the limits of our muscles, with the digital revolution we transcended the boundaries of our minds ushering us into what some scholars like Klaus Schwab have identified as the fourth industrial revolution. And so with full-scale automation and digitisation of almost all repetitive jobs done by humans by the end of this century signalling the end of human drudgery, what kinds of jobs will humans do? What will be the definition of work? How can people reinvent themselves to be still productive? How can people be engaged in meaningful work? How will people find meaning and purpose at work? Lastly, what does this kind of future portend for us in this part of the world (Nigeria)? These are the questions we as a specie, a people, a country and as individuals need to answer to stay relevant in this future that awaits us with so many surprises.

An essential ability of man above his technology is his capacity to think (reason/imagination) this one ability is what distinguishes man from every other animal species or being in the planet and equally places him at the pinnacle and centre of the world. One activity that sharpens and develops the human reasoning capacity is education. So when faced with whatever kind of futuristic challenge the best avenue through which humans can be better prepared for what awaits them in the future is through

education. Besides, we cannot think of a better means to prepare us for the next generation of disruptive technologies than by equipping ourselves with the proper kind of education.

However, the current kind of education in use in our country (and indeed most countries around the world) is not in tandem with the type of problems and challenges this technoscientific 21st century holds for us all. It is ill-structured, outlandish, anachronistic and counterproductive. Most of our school curriculum and style of formal education are modelled in the 19th and 20thcenturies to suit the needs of that time. But with the advancement in science and technology, we are now in the 21st century characterised by enormous shifts in our economy, cultures, tradition, social life, entertainment, etc. Consider these: our transportation, medicine, economics, fashions, language, mode of the business transaction has all dramatically changed in the past two centuries. What has remained almost practically the same are our educational systems, religious systems and mostly our political structures. All these three were set in the model of the 19th and 20th century's societal structure and problems. And all of them are hugely dependent on our educational system. Therefore if we want to change our religion and politics to suit the realities of our time we need to change our educational system. Applying the methodology of the 19th and 20th century in solving the challenges of the 21st century will surely be counterproductive because of the time, preferences, problems and settings are quite different.

We, therefore, need a new model of education that would be set in the 21st century time frame and address the challenges of its time. This kind of education would have to address and horn the skills needed in the age of fast-paced technological advancements of 21stcentury. This kind of education would horn such skills as the ability in us to be leaders, to learn and unlearn new skills, to be emotionally intelligent, to have the digital skills required to stay afloat in our age and to drive a robust collaborative team spirit in organisations and communities. A good review of some of these skills will help reveal what they bring to the table.

A New Model of Development: Individually Propelled Growth (IPG):

To salvage the situation, a new model of development would have to be put into practice. This model I refer to as *individually Propelled Growth* (IPG). The philosophic principle behind this model of development is based on an individual-private corporative development. With the mantra: *whatever you want to see in your community or country build it yourself*. Be it electric power, healthcare insurance,

affordable housing, standard education, effective transport system or standard social safety welfare system etc.

The engine block or heart of Individually Propelled Growth (IPG) model is *entrepreneurship*. It is the single catalyst for solving a host of the problems bedevilling the country; it would serve as the conduit for repositioning the economy. The principles of IPG are embedded in *creativity and disruptive-innovative Entrepreneurship.* These encourage the qualities of goodwill, genuine discomfort, vision/purpose, smart, hard work, creative thinking, innovation, determination/passion, strategic planning, calculated risk-taking and leadership. Entrepreneurship is described as a means of *creating something new* with *value* by applying the necessary time and effort as well as *assuming the accompanying financial, psychic, and social risks*. It equally, entails receiving the resulting rewards of monetary and personal satisfaction and independence. To apply this, we need to adopt a model that is system reorganising. (Šebestová,, 2014). Such a system is made up of the elemental traits of creativity, innovation, investigation, trust, critical thinking, and purposeful leadership.

The proposed model of IPG is akin to Joseph Alois Schumpeter's economic theory of creative destruction**.** Schumpeter (1950) surmise development as a "spontaneous and discontinuous change in the channels of flow, disturbance of equilibrium which forever alters and displaces the equilibrium state previously existing" (Gordon, 2008). The innovation concept and its corollary development have five functions:

1. Introduction of a new good/service
2. Introduction of a new method of production
3. Opening of a new market
4. Conquest of a new source of supply of raw materials and
5. Carrying out of a new organisation of any industry. (Relivingmbadays, 2013).

Schumpeter explained that entrepreneurship is not a profession or a permanent occupation and therefore, cannot formulate a social class like a capitalist. He notes some characteristics of an entrepreneur:

- Psychologically, entrepreneurs are not solely motivated by profit.

- High degree of risk and uncertainty in Schumpeterian World.
- Highly motivated and talented individual.
- Profit is merely a part of the objectives of the entrepreneur.
- Progress under capitalism is much slower than it is.
- It is leadership rather than ownership which matters. (Relivingmbadays, 2013).

Applying this model of development would see major institutions and critical aspects of life essential amenities removed from the hands of government totally and strategically placed in the hands of private individuals who would consciously design the system to be effective and efficient.

It is important to note at this juncture that the IPG model being proposed is quite different from mere privatisation of critical sectors or agencies in government. In government privatisation, the system put in place is designed and organised by the old government (it is top-bottom privatisation). Conversely, the IPG model is a bottom-top system of distribution and organisation that is highly optimised by technology. In the IPG model, even the government is systematised in a private corporative fashion. This brings efficiency and effectiveness into the system. The system organises, orients, decides and meets the government and not the other way round. The IPG model is a system reorganisation; it is a people-oriented hostage takeover guided by the ideals of common sense, the common good, abundance, innovation, trust and progress. It is a call to displace and disrupt the government and place private institutions at the centre of development. This system will be initially left to the forces of the free market, highly optimised by innovative technology riding at the back of Moore's law with the customer or citizen at the centre of the whole system.

Here the focus is the customer-citizen whom everyone is trying to please, provision of necessities, amenities, governance and politics in this kind of system would become a product or good to be marketed and will go to the most creative, innovative and effective marketer.

A New kind of Education and Skills for the Technoscientific Age

Student Customized Education: This is a kind of educational system that is structured to focus all the attention on the student, developing different methods to harness the individual potential of each student. This is a kind of educational system where different experts/teachers are assigned to a student who will help the student to rediscover their potential. This kind of model will do away with the grading

system that tries to measure the immeasurable vast potential of the student that is yet to be harnessed. It would focus strictly on praxis. With brain scans, psychological and DNA profiling the personality type of each will be determined which will enable the institution to set him/her in the right environment, with the right professionals, tools. It will also create the right experience that would horn better the skills of the student and enable him or her to develop better. Each student will have a unique academic curriculum and syllables tailored to meet their individual needs; it would be a kind of "customised education".

This type of educational system would spur and nurture the right kind of skills and experiences that would prepare the student for a techno-scientific age. It is this kind of education that I have referred to as ***Disruptive Education.*** Some of the necessary skills and character this kind of education offers and the type that would be needed in this technoscientific age are: entrepreneurial thinking and spirit; innovative thinking and digital skills such as:

- Programming and Web Development- At the heart of any tech product or digital service is coding.
- App Development.
- Digital Design.
- Project Management.
- Product Management.
- Digital Marketing.
- Social Media.
- International Team Working Experience.
- Big Data.
- 3D Printing.

Other essential skills are meditation/mindfulness; emotional intelligence; critical thinking and initiative (or imagination); leadership capacity and ability to learn and to unlearn (efficiency in learning – openness to knowledge). The rest include data/information management (information overload, i.e. deluge of data); a good understanding of the notion of time and change; the ability to know thyself: data privacy and protection; and attention management.

As the wave of automation and digitisation sweeps aside all repetitive jobs around the world the gnawing impact will be felt more. Not in the technological paradise of Silicon Valley nor in the world's business commercial hubs of New York, Hong Kong, or Shanghai nor the world's welfare safe havens of Norway, Netherlands, Australia, Singapore and Switzerland; but in the smouldering plains of the world's infamous hellish places like Yemen, Mogadishu and indeed the world's current poverty capital, Nigeria. These are the places where the populace will have no hope of survival at all; these are where there are no physical boosting infrastructure, no economic development, indigent educational systems, no healthcare system, no social safety, net structures, crude and unsustainable political institutions. These are where the people have no means of survival, where the leaders care less and have no clue as to what is going on, where human life and dignity have been reduced to zero. This is where the coming apocalyptic technological doomsday will have a severe impact and just like the Marxian world produced the urban proletarian lower class of the 19th and 20th century Industrial Age so will we see according to Yuval Noah Harari a "useless class" of the 21stcentury digital age.

Therefore as rational and good-hearted humans living in Nigeria we all have a duty to save ourselves and children from these political and technological disruptions. We are in the most privileged time of human history which has seen us have the most peaceful and prosperous cities and countries so far; and when we have the requisite knowledge, tools and resources to achieve whatever dreams, needs and wants we may have. Fifty, hundred to two hundred years from now people will look back at this period and say if only we were at this time which was the beginning of a whole lot of the technologies and scientific discoveries that informed the changes we see today in our societies we would have steered it better. What it means is that it is not yet late to start today to make the changes we would like to see in the future. Let us set up the kind of educational system we need for the future today that would influence every other aspect of our social, political, economic and religious milieu so that posterity will look on us with justice.

Recommendation and Conclusion: Future Discussions and Solutions (FDS) and Centre for Research and Innovative Studies – CRIS Academy

There is therefore, a pressing need for a platform where these challenges will be discussed and practical solutions provided. This would help steer the narrative in our country and continent and not only raise the needed consciousness of these issues but give us the required possible solutions. For this reason, I am setting up CRIS Academy and Future Discussions and Solutions**,** a platform where these pertinent issues will be discussed constructively and relevant solutions proffered. The good and constructive suggestive solutions proffered will be packaged, organised and executed. This platform will allow us to form cohesive and cooperative partnerships that would pool resources together and build the businesses, institutions and systems that would drive the change we wish to see and also save our future.

At Future Discussions**,** we treat issues involving the two major disruptions we are faced with and give proper solutions to this effect. Our constructive and fruitful conversations in Future Discussions will set the platform for the work we will do at CRIS academy where we will teach the requisite skills we need to thrive in the age of disruptions and imbue in the participants the right entrepreneurial spirit and zeal to take on innovation and exponential growth and most importantly provide the support needed to scale these innovative dreams.

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