

Challenges and opportunities in advancing human endeavor through SDGs:

Guarding against the tyranny of technology and numerology

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The Sustainable Development Goals (SDGs) present the last opportunity for the universe to mend its ways and advance human endeavor towards people, planet, prosperity and peace. In September at the United Nations Assembly, heads of states and government signed on the SDGs and by so doing committed to this mammoth task.

I was asked to identify the one single most difficult challenge of the SDG agenda and how it can be addressed?

In discussing this matter I thought I should be provocative in order to bring home the gravity of the message. I found the most difficult challenge for the SDGs agenda as the emerging internecine struggle between its crucial allies, technology and statistics. This I term the tyranny of technology and numerology. It is an emergent interest that is poised to undermine the global freedoms project of the SDGs.

How will it come about: It comes about as a consequence of the un-negotiated forced marriage of convenience between official statistics, data and technology. This is a phenomena of the 21st century where statistics has increasingly lagged technology in ways unprecedented and the gap is growing by leaps and bounds.

Prior to the technology explosion, statistics have always been produced in a technological environment with statistical needs generally being the prime driver of the technology. For instance the need for processing large scale datasets in censuses was driven by statistics offices. Kodak pioneered the manufacturing of earlier albeit less successful census data scanners. The spatial files of the US Bureau of the Census called Tiger files created a major boost and opened new frontiers for the GIS market. Dr Goodnight and his Statistical Analysis Software (SAS) at the SAS Institute dominated the statistics fraternity for at least four decades before Microsoft Excel came to the scene. The Statistical Package for the Social Sciences (SPSS) by IBM was premiere technological innovations that opened the logic of human endeavor to society and policy, and this was driven by statistical analysis needs.

What creates the environment for this tyranny:

First the disruptive technology of data revolution, a phenomena of the 21st century, with a very strong heuristic epistemology has upset the apple cut and has brought about a new forceful polity for a forced marriage between technology and statistics. Unmanaged this potentially will cost us the freedoms and wellbeing project that is envisaged in the SDGs.

Private sector interest, unless defined and managed radically differently is littered with history and practice of short termism. The world is still licking its wounds from the dotcom bubble and this was driven by the agency of technology. Less than ten years later Lehmann Brothers and Enron came to the scene rigging economic havoc which the world is hitherto unable to get out of. With the suspected wave of next economic meltdown we have Volks Wagen lying with numbers. There should be many other financial gain based scandals that are clinging to their secret loot as bananas do to grow in the dark.

The case for technology

The application of technology in the betterment of human endeavor is and has constantly been a basic necessity and it led to unravelling the universe's most kept secrets. I cannot imagine the world without Microsoft, google, WhatsUp, the free skype, free line etc. It would be a world holding lesser prospects for value creation and decimated ability to deliver on the SDGs. With the benefits that these systems deliver we have naturally and unconditionally delivered and surrendered our unsuspecting trust stock, lock and barrel and therein lie the danger to the globe.

The problem is that the emergent conflictual interests in data, statistics and technology bear the potential of replacing the arms race witnessed in the 60s and 70s. In fact the global balance of forces has recently shown clear signs of migrating strongly from a unipolar global polity of the consequence of Soviet collapse to a multi polar system that is likely to be contested by the United States cum NATO, Russia and China. These developments paradoxically occurred as the world signed on SDGs. With this new unease in world balance of forces, the internecine tyranny of technology and numerology might come as easy fodder for fueling the contestation of world affairs. The freedoms project promulgated in the SDGs can be caught in this web of heightening militarization. Paradoxically instead of delivering its mandate of global hope and development through science based systems of evidence through benevolent application of technology and statistics, the agenda may run the risk of a poisoned chalice delivering the opposite.

How have the informational, statistical and technological vulnerabilities come about?

I recall on the occasion of the 60th Anniversary of the United Nations Statistics Commission in 2007, I was a discussant of the retired Australian Statistician, Dennis Trewin on his lead paper on global and national statistics and associated systems. I dealt with a polemic of national statistics systems and national systems of statistics and this polemic was extended to global statistics systems and systems of global

systems of statistics. My conclusion was that there are neither global nor national statistics systems. Instead what we have are national systems and global systems of statistics. This state of affairs poses the most serious danger and risk to an information society. I also remarked that whilst global and national statistics systems do not exist, there is a case to be made on a differentiated scale based on country histories and their political, social and economic systems. There are stronger countries, particularly the Nordic ones who embraced data revolution centuries ago by meticulously building administrative records as the basis for their statistical and informational system. So the 21st century data revolution should fit into a well-oiled machine in these countries.

The Latin Americans were quite far sighted when they named their offices institutes of statistics, geography and informatics but they lost the vision when they dropped informatics. The latter is an important cybernetic infrastructure which manages variety, a property of complexity, through its property of recursion. A number of the Latin American countries however are still better off than the rest of the other world because they still host statistics and geography. Mexico for instance, has adapted very well in the world of technology. It is time if I were to advise that they reviewed their informatics perspective as an essential element of this triumvirate of governance in the world of big data and data revolution.

Africa has worked hard on the SDGs including costing their measurement and in this regard it has been foremost in coalescing its position towards delivery of the SDGs. But Africa remains very vulnerable to the sophistication of measurement in particular as regards taming the management of big data and data revolution. Thus Africa despite the gains is likely to suffer from the forced marriage of tyranny of technology and numerology.

What is to be done:

Although the forced marriage with all its conflicts has been consummated, what is necessary is to move towards a notion of an arranged marriage. This requires a process through which technology institutions and statistics institutions come to know one another better and understand first, the gravity of their historic calling to contribute significantly in salvaging the world from the precipice of destruction and enhance the supremacy of people, planet, prosperity and peace. Second we need to get the governance structures of technology and statistics that will benefit the intended communities of people and planet for a prosperous and peaceful ecology. Third the statistics and technology communities must as a matter of urgency meet and consult extensively with society broadly so as to discuss and define the politics, and by politics, I mean answering the question of how upfront and collectively shall we deliver on the SDGs and set an obligatory framework for delivering on measurement. This is quite different from a pledges based system.

If we are to deal with the delivery of SDGs we should heighten the freedoms project enunciated by the SDGs and we should guard against the tyranny of technology and numerology.