

## **The Impact of Information and Communication Technology (ICT) in an Increasingly Globalizing World**

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*“The Internet is becoming the town square for the global village of tomorrow”.*

**Bill Gates**

*“The present century, in proclaiming the advent of a new age of communication and information...forgot to deal with the great problem of talk, which is how to find someone to listen”.*

**Theodore Zeldin**

*“A world awash in information is one in which information has very little market value”.*

**Paul Krugman**

### **Abstract**

The socio-political and economic world, as it exists and functions today, is increasingly shrinking and interconnecting itself into a globalized village, a veritable system or structure where all parts are assigned specific roles and functions to play. It is increasingly and absurdly metamorphosing into a major theater, where the actors are assigned, again, specific roles to play. The multiplier effects of this symbiosis are enormous as some had profited from this relationship, whilst others gnash their dentition in despair over the ‘curse’ and debilitation this relationship had caused, vehicled by the Information and Communication behemoth and the cable televisions. This paper attempts to examine this relationship, the consequences thereto and some measures to stem the tide.

### **Introduction**

Hundreds of years ago, before the ancient Ming and Han dynasties of china, before and during the Grecian, Persian, Macedonian, Roman and other empires and centres of social, economic and political acculturation, the relay of information and communication to far flung provinces and regions of these empires, as well as other smaller Kingdoms, Principalities, Dukedoms, Earldoms etc., were often nightmarish. News travelled at a snail’s speed. Instructions and orders were received by potentates and other lesser official’s

weeks if not months from the time of issuance. Voyages were slow too and even in times of war, information about enemy units was often pieced together through a large, unwieldy and mostly inefficient network of spies. In contemporary times, the reverse is the case as information and communicative news, directives, instructions; social networking and important events are carried live to the average, ordinary man and distant places due to the sophistication of technologies employed for its execution. Traditional National boundaries are now things of the past as the deluge of information to the average man increasingly defies official censorship. The sociological impact of this in our modern world has far reaching consequences. This paper attempts to examine such consequences, with recommendations that may cushion the effects of its negativity.

The term information and communications technology (ICT) tends itself to a variety of definitions. As used here, the term describes changes in the electronics industry and parallel changes in the key user industries of telecommunication and computing. These changes are all concerned with applying the information, handling and processing capability of modern microelectronics and include the application of related technologies such as optoelectronics and artificial intelligence. In practical terms, this involves the use of new storage and retrieval systems of new forms of process control such as robotics as well as new ways of analyzing information such as computer aided designs.

The contemporary world is a one where every single detail of our daily life is a reflection of what transpires across continents. In essence, a kind of “squeeze” feeling is currently being experienced by an increasing number of people over what they perceive as the dearth of privacy, of social values, of eroding norms, of tarnished mores and the gradual growth of decadence of the human society. Others argued on the contrary, that life has become more easier, the knowledge of the continents and political/ economic upheavals /events and achievements at the fingertips of the larger global audience the minute the event happened, and most importantly, they argues that this free flow of ideas, knowledge and information, unprecedented in the centuries before, had actually made man safer. Whilst the former school of thought argue that these free flow of information heralds societal decadence and the spread of dangerous ideas, ideologies and decadent social and moral values, which is exported to the hapless global audience, thereby making living less safe, nasty brutish and short, the latter argue that the world today is a better place to be owing to these flow of information. As the arguments go back and forth, we discern that all the hoopla raised was necessitated by the rise, and rise of Information and Communication Technology.

Barlow (1996), made the following proclamation in anonline discussion group and on his web site:

Governments of the industrial world, you weary giants  
of flesh and steel, I come from cyberspace, the new  
home of mind. On behalf of the future, I ask you of the

past to leave us alone. You are not welcome among us. You have no sovereignty where we gather. ...You have not engaged in our great and gathering conversations, nor did you create the wealth of our marketplaces. You do not know our culture, our ethics, or the unwritten codes that already provide our society more order than could be obtained by any of your impositions.

Many years later, Barlow's claims do not have the same ring to them as they did in 1996, when the Internet was the best "new, new thing" that was available in information and communication technology (ICT). Now governments worldwide are increasingly exploring the possibilities that these "new, new" technologies might have for their activities and operations. E-government and other ICT related terms are increasingly coming into vogue.

As a result of these developments, society has moved more fully into what has been termed 'the Information Age' or 'the Information Society', but the Internet is not the only ICT medium to be related to this change. Other communication tools such as mobile phones, the social networks like Facebook, Twitter, Myspace, yahoo messenger etc. and text messaging have also been used to create powerful and dynamic networks (Rheingold, 2002). To reiterate the point made earlier, while technology is a driving force in the way society operates, it is the take-up and use that is made of the technology that changes the way society operates and functions, rather than the technology itself. Computing pioneer Lyons (1988) used a piano analogy to capture this:

Pianists know that music is not in the piano. It begins inside human beings as special urges to communicate feeling.... The piano at its best can only be an amplifier of existing feeling, bringing forth multiple notes in harmony and polyphony that the unaided voice cannot produce. The computer is the greatest 'piano' ever invented, for it is the master carrier of representations of every kind.

Information and communication technology, otherwise known as ICT, play a crucial role in the rise and growth of job creation. It is argued that it adds value to goods and services, that it encourages many a government, economies and businesses to be more proactive, efficient, accountable and effective. Reid (1997) opined that all recent analyses point to the fact that economies, and businesses, that invest in research in a particular technology are those that benefit the most from this technology and its progress. Those that rely merely on knowledge such as experience, reason, authorities and empiricism or the knowledge developed by others elsewhere, are ultimately left behind.

Some will argue that an indigenous research capacity is essential to be able to master and assimilate technologies and to exploit them to economic and societal advantage. This is true for all technologies, and essentially true for ICT:

- ✚ Where the frontiers of knowledge and research are increasingly broad
- ✚ Where the pace of innovation is accelerating
- ✚ Where the people and organizations increasingly depend on ICT.

With the introduction of many-to-many communication, the Internet and the World Wide Web have become powerful, dynamic and unequalled information and communication tools that are being used more and more by millions of people around the world. As computers become a common feature in libraries, offices, the home, universities and so forth, more people become comfortable with using the Internet for all sorts of purposes. Governments have been no exception in this regard.

### **E-government**

Love them or loathe them, computers are becoming a common feature of the internal and exterior décor of society and governments are slowly realizing that ICT, the Internet and the Web may have potential for the running of government, government departments and the public sector. ‘E-government’ is a term that has been circulating in Information Technology (IT) and government circles for some time. At the third Annual E-government Conference held in Lisbon during May 2002, the term ‘e-government’ was used in the following way:

E-government is the application of Information and Communication Technology by government and public sector agencies, and is transforming the way governments interact with their citizens. Its use promises to enhance the effectiveness and efficiency of government and radically alter its relationship with the public. Improvements in communication and technology are playing a vital role in raising the living standards and empowering people to understand and gain access to all the initiatives and support systems that are available to them.

As the Internet took off in popularity and more people were able to access it, governments increasingly looked to it as a possible way of reducing costs, improving communications between government departments and the public, increasing efficiency within the bureaucratic systems of government and encouraging greater citizen participation in government processes (Gronlund, 2002; Fountain, 2001; Deloitte Research, 2000; Coleman 1999). E-government was first formally mentioned in the United States, during the Clinton administration (1993- 2000).

Generally, information- and communication technologies (ICTs) are being introduced in an organization in order to increase operational efficiency, quality, and transparency. Thus, most research focuses on such issues. However, besides these undisputable gains, the introduction of ICTs also leads to substantial changes in the power relationships among all involved actors. Consequently, and as a result of ICT-enhanced or modified operations, some of the actors will increase their power, while others will lose some of their power. So far, little research has been done on the impact of ICT on the power relationships between organizations. Most importantly, as it concerns this research, very little research work had been done on the negative societal impact of ICT. The existing literature does not properly conceptualize the damaging effects a globalized, computerized and digitalized world could pose to the young generations, as well as the damaging changing effects to the larger society.

The power of the PCs and the internet is that they can be applied flexibly to almost any task that involves the creation, manipulation, acquisition and distribution of information. Unlike many other technologies these tools are not limited to fulfilling one of two functions. A user can make some changes in software instruction and apply their core capabilities to the performance of an infinite number of tasks.

The historical significance of these developments is that the marriage and mass diffusion of PC and internet capabilities that in the past were available to only a relatively small number of large organizations are spreading across society at relatively low cost. The resultant effect is that citizens and organizations in all walks of life will have an unprecedented opportunity to participate directly in and benefit from the information age. The supply of communication and information equipment has become increasingly competitive and diverse. The supply of networks and services has also become more diverse because of innovation and deregulation. Again, the supply of information content also is becoming more diverse. This is clearly the case with relatively new electronic media like the internet, PC software etc. mass communication industries like publishing houses, television and radio studios, Cinemas etc are not left out of the melee as there have been many cooperate mergers and acquisitions of late that have increased the concentration of ownership in specific markets relative to few years ago.

Users are becoming more empowered by the new electronic information environment for anyone can generate and manage their own information and services and make them available to anyone else which is an extraordinary boon for free speech and other social development. Other technologies that have blossomed in recent years, like cellular phones, pagers, faxes and handheld computers, sometimes called 'personal digital assistants' had all given people the ability to manage information in a customized basis.

The global internet is changing the way people communicate and will continue to do so in the years to come. The two most popular internet applications; electronic mail and the World Wide Web, has come to account for more

messages between people per year than the conventional postal service. Similarly, the web provides users around the world with the ability to create their own multimedia information-seamlessly incorporating text messages, pictures, audio and even video into customized electronic 'web pages' that can be accessed and downloaded to personal computers by millions of other people.

### **A Global Network Of Networks**

Another entrant in the international market is the cable television otherwise called 'wireless cable' and officially known as multipoint multi channel distribution service or simply MMDS. The low cost of this service makes it attractive for areas of low population density and for countries whose per capita income is low (Laufer: 1998). Although its requirements for line of sight transmission generally mean tall receiving antennas are needed. This low power system can provide around 30 channels to an area of 54 kilometres in diameter and the number of channels offered will go up with the use of digital compression, local multipoint distribution service (LMDS), or cellular TV.

### **The World Wide Web**

There is little doubt that the internet has already played a major role in developing the global information infrastructure. It has shifted the focus of the computer industries and is accelerating the convergence of communication industries. Just as computer technology is compelling the digitalization of broadcasting and the telecommunication services.

As the internet grows, its users and its uses to which it is put reflect the larger society for both good and ill. For political, social economic and ideological reasons, and in efforts to control content, several countries short-sightedly have attempted to limit their citizens, access to certain newsgroup and WebPages (Castells; 2001). Similar connections arise about access by children to sexually oriented contents; although in this case, blocking software tools, the parent can place on the computer provide a better alternative than across the board government censorship. Such solutions preserve freedom of speech and inquiry for adults while facilitating appropriate parental supervision.

Individuals and nations have raised concerns over the issue of privacy-for individual users and governments alike. Internet data packets do not respect national boundaries and borders and the system's open, egalitarian accessibility means that each user is an equal among equals-a disturbing thought for those who have struggled to gain a position of authenticity with conventional technologies and media.

### **Cultural Imperialism**

In the contemporary international system, mass communication, i.e., the media and ICT are important agents of the transmission of cultural imperialism. Imperialism refers to all forms of political, economic and social control, exploitation and domination of a weaker people by a stronger people. Imperialism attempts to substitute informal to formal modes of political control of a nation (Galtung: 1981).

### **Media Imperialism**

This refers to the imbalance and unidirectional nature of the international communications and information flow between the advanced industrial nations and the less advanced nations. Media imperialism is an important offshoot of cultural imperialism. The structural inequality in the free flow of information and communication between the advanced industrial nations and the less advanced. The major features being the unidirectional or one way flow of information. The vertical flow of information, control and domination the media, the web etc are characterized with informs the distortion and disarticulation arising from this imbalance in global information flow to the detriment of the less advanced nations (Fanon: 1966).

The press agencies of the United States and its broadcasting services, satellite and internet communications have the capacity to receive, edit and transmit information enough to submerge the entire press of the less advanced countries. More so, when the news agencies of these well to do countries like the Associated Press (AP), United Press International (UPI) of the United States of America, Reuters of Britain, Agency France Press AFP etc. portray unjustly and in a distorted manner, the image of less advanced countries.

By the turn of the millennium, according to Rheingold (2002), the United States alone control 75% of the world's circulation of television programmes, 50% of cinema films, 80% of computers etc.

### **The Social impact of ICT on Third World/Developing Nations**

#### The effects on leisure time

The unbridled use of the ICT and its accoutrements had, in no small measure, contributed to the low work output globally. To a large extent though, global reliance to machines and robotics, to inanimate rather than animate, to preference of fewer personnel to man giant infrastructure and computer software/hardware in the work place is a serious contributor to massive unemployment in some industrialized countries. Rather than focusing on pressing issues that affect either the workplace or issues that require concentrated focus, workers now tend to visit more of social networking websites, or mundane web pages that have little or nothing connecting them to their primary responsibilities. The tendency is that workers reverse leisure time, swapping office hours with addictive visits to the websites and relegating their work, at best sacrificing them, to leisure. This promotes laziness, unproductivity and its attendant social malaise.

#### The effects on social interaction

It is appalling to note that the effects of the addiction to ICT to a large extent, has ruined marriages, relationships, the promotion of promiscuity and the degradation of indigenous societal mores. Whilst on one hand, the opportunity to meet people across the globe is welcome; the other side of the coin is the distortion of social relationship and the damage and havoc this is wrecking on the social fabric of the society. The wide ranging effect of this social

abnormality simply is that face to face courtship is relegated to the background as 'cyber dating' as it is known, currently becomes the fad. The African traditional system for example, which cherishes established laborious courting and marriage norms, is the worst hit. The dangerous social ills, promiscuity and asocial deviations that the African societies had successfully protected and prevented over the years are now in tatters and virtual collapse. Thanks to a globalizing world where information flows faster.

The general society that cringe from slander and libel in the years of yore are fed sumptuous meals of gossips and lurid tales that delve into the private lives of superstars, government officials, sports icon and virtually, everybody. The multiplier effect of this loss of privacy is enormous because there is no sweet tantalizing news, as good as bad news and a reporters ascent into instant stardom is assured the minute he/she publishes a sensationally negative news debasing a public figure, litigations against him/her later on notwithstanding. The damaging information so released by the multiplying freelance journalists often results in the downfall and personal destruction of their hapless victims. The clamour for the eradication of free speech and the abolition of the freedom of information laws are currently assuming strident dimensions due to the debilitating damaging effects it is exacting on modern society. If allowed to take root, considering the distortion of values and the total disregard to the laws of libel and slander in contemporary society, the counterproductive effects, few years from now, are frightening.

#### ✚ Hacking

Hacking involves breaking codes and passwords to gain unauthorized entry to computer systems. Once into a computer system a hacker who knows his onions and who is vast in his field can do an enormous amount of damage. They also manufacture viruses, Trojans, worms etc and are defined generally as computer programs that can copy itself and infect a computer without permission or knowledge of the user (Gromov: 1998). Unfortunately, many computer users especially in the third worlds had fallen victim to the antics of perfectionist fraudsters who prey on the ATM accounts, credit card accounts and any other private and confidential information of innocent people, fleecing them without them even knowing for months. Another dimension is the widespread practice of the advanced fee fraud, otherwise known in Nigerian parlance as "419" that many a youth in Nigeria see as the fastest way to "hit" the jackpot. Their activities bring opprobrium to the Nation, as well as fostering suspicion and embarrassing notion and global perception of a particular set of nationality, by the larger International community, due to the activities of a few. This malaise, which gives cause for concern, arose out of the sophistication of the unemployed, the frustrated, the derelict and the get-rich-quick segment of the society, in mastering the rudiments and knotty components of ICT with the sole aim of defrauding, siphoning resources as well as in hoodwinking unsuspecting victims into their spider web of deceit and fraudulent activities, due to the rise, and rise of ICT.

To some, this practice of some nebulous unscrupulous individuals is a response to the sins committed by the colonialists whilst they held sway in pre-colonial

Africa. The rape of Africa can never be quantified with the large capital, material and human resources forcibly expatriated to the metropolises (Rodney, 1972). Therefore these miscreants argue that the expatriation of the capital so stolen by the colonialists in the colonial era, using the very instrument of capitalist exploitation, the ICT, is justifiably right. The financial rape of foreigners, especially those from the western sphere of the globe and Europe, in a rapidly globalizing world however gives room for serious concern for any Nation that wants to avoid global social opprobrium and disrespect. This is because the victims belong to the same erstwhile colonial powers who still determine and decide, economically, who gets what, when and how as far as global economics is concerned. Therefore the perpetuation of heinous cyber-crimes, in the guise of harnessing the potentialities of ICT, really adds to the indices indicating whether a particular country is corrupt or not. This gives birth to credibility problems and the denial of direct foreign investments to the so-tainted nation. The multiplier effects also is enormous in this regards because if there are no foreign direct investments (FDI), small business and the establishment of a strong middle economic class, will be non-existent, bringing to fore, the harsh dichotomy between the haves and the haves-not. But we digress.

#### ✚ Health Risks:

Repetitive Strain Injury (RSI) - This is caused by repetitive finger movements over long periods of time and can cause serious pain in the finger joints. It is important to realize that working with computers, particularly for long periods of time, can be dangerous to health. Eye strain is quite common among people using monitors over extended periods of time. It can result in irritated eyes and blurred vision. Again, sitting at the computer for long periods of time is never advisable. Yet increasingly, many youths of today and even the elderly are currently infected with the ICT bug. If they are not on Facebook, they will be on Twitter, Myspace and other social networking sites to the point of crazed addiction. Some spend hours on end 'surfing' the net, ignoring the screaming pain from their bodies to stop.

Others meanwhile, concern themselves with longer periods in the computers and of course, the internet, 'surfing' for a different item; new victims (or mugus as they call their victim) to fleece financially using deceit, lies etc. because they spend longer periods of time looking for who to swindle, they pay scant attention to the telling signs of damages to the eyes, the joints, the back, the spine as well as general signs of fatigue from their bodies. What would one profit, if he/she gains the world and loses his/her health?

#### ✚ Effects on African societal values.

It is clear, to discerning minds, that the rise, and rise of information technology and the pervading, if not debilitating effects of global cable international networks, had wrought unquantifiable damages to the lore and norms of African societies with Nigeria in focus and the Igbo nation the hardest hit. Most of the cultural strings that had held us together in the past are now in shreds. The

respect for culture and tradition and respect for traditional stools are now debased. Even the indigenous language itself is threatened, all of these attributed to the rise, usage and abuse of the ICT and the international cable networks. Nowadays, imported foreign debased behavioural patterns as well as unsocial attitudes awash from the foreign media, are the fad amongst the youths that pride themselves as the future leaders of tomorrow. We dare ask what future? What future are we looking forward to when we have imported cultural norms that replaced our own? What future do we look forward to when our youths abandon indigenous music, food, dressing, language and way of life to replace same with those derived and imported from the foreign media? What future do we look forward to when the very youths that pride themselves as the future of the nation debase themselves and subject the nation to international opprobrium through the bastardization of the good usages of ICT, in pornography (porn) and scam purposes? Indeed what future do we look up to when our future leaders are groomed in scam and other fraudulently related activities with sophisticated ICT materials as vehicle? Indeed, the prospects are grim.

### **Conclusion and Recommendation**

In this paper, we examined the rise and growth of the ICT globally. We appreciated the influence of the ICT and rather than condemning it, we looked at the other side; the negative aspects that much of the intellectual world failed to celebrate. The good, the usefulness and the beauty of the ICT is currently points of major seminars and conferences and hordes of writing. But strictly from the African perspective, this paper attempts to point out the negativity of the ICT especially on the society etc.

The rise of homosexuality, bisexuality, the rising global crime rate, the instability and political hiccups today in the third world in general and in Africa in particular arose out of a long interrelationship with an alien culture the subsequent distortion of indigenous values and mores in place of the foreign ones. The tragedy of the African story can be better understood against the background of this unequal balance between the races and social/cultural groups. Whilst the Caucasians believe in the superiority of their race over others, the negroids accepted the second-class positions and strive to imitate their 'superiors' in dress styles, languages culture, music and food. Whilst the former aspires to attain excellence and innovations in both the positive and negative spheres, the latter are content with watching from the sidelines as events evolve and innovative inventions by the former unveiled, for them to 'ohh' and 'ahhh' and scramble to attain the status of 'those –who-buy- the –original-from-the-source'.

Our people are gradually led into the circle of doom and decadence, of social, political and economic malaise, through the rise and rise of the ICT.

What can African governments do? To provide an alternative is the simplest thing any well thinking government can and will do to reverse this anomaly. We can start by censoring information running at full speed in the internet and over

the cable networks, ensuring that those trickling down to our teenagers and children are reduced to the barest minimum. This is because they are the future hope and lifeblood of our common heritage. Once the few that are not yet tainted are infected, then all hope is lost.

The academic curricula of our institutions must be inundated with topics on African social values and ethics, and history. Our national television, radio and print media must be restructured in such a way that foreign influence be reduced to its barest minimum, via local content programmes. Sensitization campaigns and reorientation must be accelerated, or introduced, where none existed, and geared towards the return of discipline, austerity and humanness

We hope and believe that the kernel of study in this paper will ignite rounds of scholastic brainstorming, especially from the African perspective, on how we can ,literally, turn ‘white litmus paper to black’ (stem the tide and correct identified anomalies), if not for ourselves, at least for our future generations yet unborn.

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