A Kantian Interrogation of Information Revolution and its Socio-Economic Impression on Contemporary Living

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Abstract: Information revolution is upon us in the 21st century more than any generation hitherto. When it has been able to improve life by shortening distance, time and space, it seems the horrors and price to be paid for this age far outweighs its calculated and obvious benefits. How is this possible? Is it really the case that the age of information revolution has nothing but good tidings for the human species? What are the socio-economic implications of information revolution? This study concerns with these posers as it concisely archives the evolution of the information age from antiquity to modern times. It reflects that despite the benefits, the scourges that present themselves in the information age cannot be easily wished away as it leaves humanity in an alienated state, properly positioned for socio-economic vices. The submission of the essay hence, is that to be effective and truly liberating, the age of information revolution must take cognizance of humans not as objects comparable to machines. The converse of this assertion unfortunately has been the case. Hence, Kant's imperative to treat humans not as means is regurgitated for improved relation among humans on the one hand and the association between machine and humans on the other hand.
Keywords: Information Revolution, Alienation, Unemployment, Economy, Kant.

Introduction

The free availability of information at our fingertips is one the ways Information Revolution has changed our world.[1] It is the case that the 21st

1 R.A. James. *Mass Communication and globalization: Information Revolutions* (Boston: Butterworth-Heinemann, 1996), 201.

century way of living is one that revolves around technology. It is a world where one push of a button activates and in a blink of the eye initiates and concludes a task that would have taken hours of greasy human labour. It is not untrue that the amount of information that the human species has garnered through the wielding of technology has more impact than what is usually thought on the surface. It is the case that the availability of information at the doorstep of humanity in the 21st century has never been surpassed by generations hitherto. It is also the case that humanity in the 21st century has fared worse in the dichotomy between the haves and the have-nots. This, in essence is the foundation that this essay purports to ground information revolution. It is therefore beckoning to inquire: what exactly is information technology? Has it been able to uplift humanity regardless of socio-economic background across board? What positive or negative social vices or virtues does it nurture?

We concern with the above questions in the remainder of this paper. The next section attempts a conceptual clarification on the meaning and nature of information revolution. It also makes the attempt to uncover three phases of information revolution in human history. The third part of this study reveals that despite some of the improvements in some sectors of human existence, information revolution has done more harm than goodness. This part of the essay unfolds the position of this paper. Whereas one may laud some of the undeniable achievements that information revolution and technology has brought to the doorstep of humanity, it is the case that rather than foster human relations, information revolution and technology encourages alienation. The consequence of this is not farfetched – unemployment soars as persons now lose jobs to machines. The latter outcome of this is crime and related vices in the community. To combat this malady, the section calls for the second imperative of Immanuel Kant to caution the technological breakthroughs of the present age. The fourth section concludes this reflection.

Information Revolution: A Historical Panorama

In this section, the primary task is to lay bare the meaning and nature of information revolution and also point to how it has been able to develop or evolve with the history of humanity. The term 'information' refers to any communication or representation of knowledge such as facts, data or opinions in any medium or for, including textual numerical, graphic, cartographic, narrative or audiovisual forms.[2] On the other hand, 'revolution' implies a sudden and often violent change, but revolutions can be more

2 B. Adeoye. *Technology Teaching Guide for Teaching and Learning*. (Ibadan: His Lineage Publishing House, 2015), 16.

subtle, evolving over decades, even centuries.[3] In the general parlance, revolution is an overwrought description of any societal developments.

What would constitute an information revolution? Revolution takes place all over the world. However, there is no blood shed in this revolution. It is the revolution of information. The term information revolution may relate to, or contrast with, development of technologies (such as computers, digital communication, microchips) in the second half of the 20th century that has led to dramatic reduction in the cost of obtaining, processing, storing, and transmitting information in all forms (text, graphics, audio, and video).[4] It is changes involving new means of communication that permanently affect entire societies, changes that have shaken political structures and influenced economic development, communal activity, education and personal behaviour.[5] In the words of David Albert and Daniel Papp:

> Complexity and change are the two defining characteristics of the Information Age. Our successes as individuals, families, organizations, communities, and societies will depend more than ever upon our abilities to adapt, in near real time, to deal with increasingly complex and dynamic situations which will be characteristic of the Information Age. Each of us, individually and institutionally, has developed mechanisms to either shield us from or deal with complexity and change. Sometimes these mechanisms work too well. That is, they prevent us from sensing how much our worlds are changing, thus robbing us of an opportunity to understand our environment and appropriately modify old responses or develop new responses. The results are often catastrophic; we break rather than bend. History is replete with examples of changed environments that were recognized too late for an institution to successfully adapt. Similarly, history also has many examples of changed environments that were recognized, but by institutions or societies that were themselves unwilling or unable to adapt to new conditions.[6]

The Information Age is and will continue to present us with these kinds of challenges at an alarming rate. The increasing complexity of our environment and the actions necessary to maintain or improve our equi-

3 George C. Coulton, *Medieval Village, Manor and Monastery* (New York: Harper & Bros., Torchbooks, 1960), 15.

4 "Information Revolution" Available at: http: http://www.businessdictionary.com/definition/information-revolution.html Accessed March 25, 2017.

5 F. Irving. *A History of Mass Communication Six Information Revolutions*, (Boston: Butterworth-Heinemann, 1997), xvi.

6 David Albert & Daniel Papp, (Eds). *The Information Age: An Anthology on Its Impact and Consequences.* (New York: CRRP Series, 1997), iii

librium will only serve to make these challenges even more difficult. Successfully responding to these challenges will require three things. First, we will need to recognize that something has changed. Second, we will need to understand the implications of this change. Third, we will need to develop timely and effective responses.[7]

Indeed, the world is in the midst of an information revolution now, a period identified with capital letters as the Information Age, a product of the information revolution of the second half of the twentieth century. Once, again the posers rear hear again: How does the information and communication revolution fit within the broader sweep of human history, or is it indeed such a significant departure for humankind that past history has little relevance? What are the technologies of the information and communication revolution? What do they do and what will they do? Is it really a revolution, and are we really entering an Information Age?[8] Perhaps at this juncture the fact that the world has witnessed information revolution in three phases could assist in responding to some of these posers. We shall briskly concern with each of these shortly.

Perhaps it will be helpful to commence with the admission that "The age of information revolution has evolved through three phases over a 150 year period."[9] This does not mean that there have not been things similar to these before this 150 period. Eric Havelock and Jackson Hershbell in this connection educate us that:

> To reduce the impact of distance, time, and location, men and women throughout history employed various forms of information and communication technology. Drums, torches, signal fires, flags, pictographs on papyrus, and writing on clay and stone tablets were among the earliest technologies humankind used in its efforts to reduce the impact of distance, time, and location on communications. Codes, cyphers, trusted agents, seals, and signatures have always accompanied communications and have grown in sophistication along with communications methods. Sometimes people even turned to the animal world to enhance their ability to communicate; King Solomon used messenger pigeons to deliver messages as early as about 1000 BC.[10]

7 Ibid, iii

8 Ibid, 2

9 Daniel Papp, David Alberts & Alissa Tuyahov, "Historical Impacts of Information Technologies: An Overview." In D. Albert, D.S. Papp, D.S. (eds). *The Information Age: An Anthology on Its Impact and Consequences.* (New York: CRRP Series, 1997), 13

10 Eric Havelock & Jackson Hershbell. *Communication Arts in the Ancient World.* (New York: Hastings House, 1978)

What makes the 150-year period, which we shall concern with, distinct is the fusion of space-time in almost all spheres of information. This 150-year period may be viewed either as a single ongoing information revolution with three distinct phases, or as three distinct historical periods, each with enough significance to be labelled a revolution. In this volume, for reasons that will become clear, the editors have opted for the view that each period warrants being labelled a revolution.

The first modern information revolution began in the mid-nineteenth century and extended for approximately 100 years. This first revolution primarily enhanced communications. During this period, technologies such as the telegraph, telephone, and radio came of age.[11] These technologies transformed not only humankind's ability to communicate, but also people's lives. Especially in industrial societies, they changed the ways that people related to one another and altered the ways that business, government, and military and foreign policy establishments conducted their affairs. Given the dimensions of their impacts, these technologies also helped modify the structure of the international system.

The second modern information revolution extended from the mid-twentieth century until perhaps the 1980s. During this period, technologies such as television, early generation computers, and satellites linked the world together in ways that it had never before been linked.[12] These technologies, like the telegraph, telephone, and radio before them, again transformed humankind's ability to communicate; changed the ways that people related to one another; altered the conduct of the affairs of business and government; and modified the structure of the international system.

Since the 1980s, still more information technologies have been developed and have begun to be employed technologies with capabilities that dwarf those of the information technologies already in use. We are thus on the verge of a third modern information revolution, one that perhaps should be labelled a "knowledge revolution"[13] since it encompasses advances in information technologies that significantly alter the politics, economics, sociology, and culture of knowledge creation and distribution.

How the technologies of the first two eras evolved and helped shape human activities and institutions is an important story, for it provides an understanding of how and why things are as they are. It provides an under-

11 Daniel R. Headrick, *The Invisible Weapon: Telecommunications and International Politics 1851- 1945* (New York, NY: Oxford University Press, 1991)

12 George G. Blake, *History of Radio Telegraphy and Telephony* (New York, NY: Arno Press, 1974)

13 Op Cit, Daniel Papp et al, 14

standing of how and why international actors and the international system have evolved. Most importantly, it may provide clues about how emerging information technologies might influence the future shape, relationships, and conduct of human institutions, human activities, international actors, and the international system.[14]

It is in the spirit of inquiring into how information revolution and technology, which we have given a terse historical cogitation, can shape human life. In the next section, the aim is to give a principal exposition into the ways that information has shaped human life.

A Kantian Analysis of Information Revolution on 21st Century Existence: It is not incorrect that the world of today is wired through communication and technology for the sake of easier access to information. The hoi-polloi would not doubt admit that life has been of ease relatively speaking. However, it is also the case that the standard of living or the living conditions that are encountered in the present century leaves the hoi-polloi close to no elevation. Hence, it is pertinent to ask whether information technology has brought more happiness rather than pain. Perhaps before making a critical appraisal of the position of information technology in humanity of the 21st century, it would be pertinent to commence by highlighting some of the positive results that it had delivered.

Mayo offers many good examples of how the information revolution has benefited society. He also offers many predictions for the future. According to Mayo, the benefits of information revolution have changed how society works, plays, and lives. These changes have brought many benefits to society and are still bringing benefits.[15] In argument Mayo shows how the information revolution as benefited society and will continue to benefit society.

To begin with, the world of mass media has brought the different change, which was never expected in this world. In today's time the value of newspapers, magazines, radio, television and journals have had the great impact on a man of all nations. In very less time, we can come to know about the news of any other area or nation. What has happened and is happening around us is easily accessible and available to us with the help of television, radio and newspapers. Probing Further, social issues like national integrity, girl child education, population agenda, can be advertised to the people through mass media. In addition, it plays very crucial role at the time of emergencies or natural calamities. In addition, it

14 Ibid, 14

15 J. Mayo. "Has The Information Revolution Benefited Society" Available at: http://digitaltermpapers.com/essays/has-the-information-revolution-benifited-society Accessed March 25, 2017.

is the biggest source of entertainment of all age groups.

The greatest benefit of the information revolution is that know for the first time in history every person has the ability to obtain the latest information instantly. When people are informed, they have power, because knowledge is power. With knowledge, people can make much more informed decisions. They know and understand what is happening in the world around them. Back in the eight-teen hundreds, many people did not know for a few months who had been elected President of the United States. In recent times, everyone knows who is running and who wins thanks to the information revolution.[16]

Online and international network is another obvious benefit. The information revolution has also brought about the formation of the information superhighway. The information superhighway is a seamless network of computers and databases were anyone, anytime, and anywhere can access limitless information. The information superhighway gives people the power of knowledge. Which is why Francis Beacon said; "knowledge is power.[17]" It allows people to see things they might have never seen, if it were not for the information superhighway. With the information superhighway, people can take virtual tours of museums, campuses, and buildings not even constructed yet. A person can also walk through buildings that no longer exist.[18] In other words, the information revolution has enabled many people to actualize their dreams and satisfy their curiosity by learning nearly any concept.

Thirdly, there is the global benefit attached to information revolution. The information revolution has also made are lives much easier. The lives of people all over the world have been affected because of the information revolution. Years ago, people of the rich nations did not know of or did not understand the blight many people of poor nations faced every day. Now that the whole world knows of the poverty many people face the world's people are doing something to stop poverty.

Fourthly, the information revolution has also exposed many people to different cultures. This exposure has helped to end the hatred between many different cultures. The information revolution has also made it possible to do many things form the comfort of one's own home. One can now go to a web site for a car company and play around with options to see what they want. One can do all of their shopping online. People

16 Ibid.

17 S.E. Stumpf & J. Fieser. *Philosophy History and Readings*, (New York: McGraw-Hill, 2008), 191

18 J. Mayo. "Has The Information Revolution Benefited Society" Available at: http://digitaltermpapers.com/essays/has-the-information-revolution-benifited-society Accessed March 25, 2017.

who once relied on someone else to buy stuff for them can know do it for themselves.

The communication value attached to information revolution may not be easily wished away. The information superhighway also makes life easier by allowing families to communicate with each other from anywhere in the world. The information superhighway also makes it possible to get a college degree, and one never has to step foot on a college campus. In other words, the information revolution is really important because it made information way easier to obtain and it made people way more knowledgeable.[19]

Furthermore, the medical field has benefited greatly from the information revolution. Doctors must agree that having the ability to go to a computer and have access of a database of every know illness is a very powerful tool. Before this database, doctors had to either do intensive research or just know the signs of an illness to determine what you had. Sometimes that was not even enough. If you had a rare topical illness chances are, they would never figure out what you had. But now a days, all a doctor has to do if he has a patient with illness he does not recognize is go to a computer, type in the aliments of the patient, and the computer spits out the possibly illness the patient has. The information revolution is also making more people aware of deadly illnesses and how to prevent and diagnose them. The fight against breast cancer is one such campaign that has used the information revolution to get its message to the masses. The information revolution also made it possible for doctors on opposite sides of the world to collaborate on patients. The information revolution has made it possible for doctors to have instant access to a patients records, a database of every know illness, and the knowledge to more effectively diagnose and treat the sick. I do not know about the rest of the world, but I am happy in knowing that my doctor can diagnose anything.

Lastly, education has been drastically changed because of the information revolution. The education system has been changed, because now everyone knows the importance of an education. With parents and children having the latest information about education, the education system has to adapt and become better. Using the information revolution, the education system has access to latest textbooks, lab manuals, and procedures. A good example of how the information revolution has effected education is one involving a chronicle sick child. This child was always in and out of the hospital, but he never fell behind in class. The reason for that is he was connected to the Internet. There was cameras placed in the classroom and he was involved in an interactive TV classroom. This example shows how a child at one time would have falling behind in class

19 Ibid.

and would have probably had to repeat that grade, but because of the information revolution, he is on track and will not have the feeling of being left behind. The information revolution has also allowed many physical and mental disabled children to attend public schools instead of schools for the disabled.[20]

In the face of the foregoing positive results that may be adduced to information revolution, it should be stated that some ills also come with information technology. As a result of the foregoing, it is has come to public knowledge, the "surge in cancer as the whole air wave is jagged by radiations and electrons."[21] In order words, despite the medical breakthroughs incurred because of information revolution, humanity is now faced with diseases and ailments that would have been alien to the minds of those who lived before the 21st century. And for most of these ailments, either the medical facilities brought about by information revolution are either too expensive or ignorant of.

The most crucial role that information revolution and technology seem to be playing is presented by alienation. This inevitably leads to the alienation of human beings from species life. There is an increasing sense of rootlessness, alienation for the individual that technology has affected. Within human society, technology is having an autonomous and uncontrollable status, destructive of religious values and a fostering of materialistic values. These, in Heideggerian terms are clear cases of perceiving technology as the only mode of revealing. For it has brought about a technocratic society and a bureaucratic state in which the individual is increasingly submerged, marginalized, manipulated, dehumanized, and de-personalized. In the words of E.M. Uka: "Modern technology has led to the creation of sub-cultures and counter-cultures. Such sub-cultures as *culture of poverty* is a culture in which poverty is a way of life…There is also the phenomenon of counter culture. This term is used to describe youth culture whose members reject the key-norms and values of the prevailing culture. They question the social, economic and moral basis of conventional technological society."[22] Perhaps we should scan this perspective a little deeper.

The parking lot of General Electric's appliance factory in Louisville, Kentucky, was built in 1953 to hold 25,000 cars. Today's workforce is 10,000. In 1985, 406,000 people worked for IBM, which made profits of $6.6 billion. A third of the people, and all of the profits, are gone now.

20 Ibid

21 Op. Cit, D.R. Headrick, 88

22 E. M. Uka, "Issues in Technology: Man and Technology, Who Controls the Other?" In P. Alozie (ed), *Technology, Science and Environment.* (Calabar: University of Calabar Press, 2006), 5

Automaker Volkswagen says it needs just two-thirds of its present workforce. Procter & Gamble, with sales rising, is dismissing 12 percent of its employees. Manufacturing is not alone in downsizing: Cigna Reinsurance, an arm of the Philadelphia giant, has trimmed its workforce 25 percent since 1990.[23]

Change means opportunity as well as danger, in the same way that the Industrial Revolution, while it wrought havoc in the countryside and in the swelling town, brought undreamed of prosperity. No one can say for certain what new ways of working and prospering this revolution will create; in a revolution the only surety is surprise. The transition may be difficult. As Neal Soss, chief economist for C.S. First Boston puts it: "Adjustment is the dismal part of the dismal science." Moreover, as Robespierre might have observed on his way to the guillotine, this time it's personal—for the inescapable tumult involves your company and your career.[24] Thomas Stewart seems to be closely concerned with the way that technology has served to render humans alienated from work, replaced by machine and rendered 'disabled', unemployed, constituting the bulk of those that could incur the wrath of vices on the society. He avers:

> In the past twelve years, InterDesign's employment has tripled, total space has quintupled, and sales have octupled, but its megabytes of computer memory have gone up thirty-fold. Seven years ago Immerman dug deep and found $10,000 to buy a used disk drive that had 288 megabytes of storage—capacity that costs about $350 today. Says Immerman: "In the 1970s we went to the Post Office to pick up our orders. In the early 1980s we put in an 800 number. Late 1980s, we got a fax machine. In 1991, pressured first by Target, we added electronic data interchange.[25]

Physical spaces and buildings where humans can meet and relate to transact business innovations are waning the case in the information technical age. For Thomas Stewart: "Cyberspace is even cheaper than catalogue space, and much lower than rent at the mall. The shift to the information economy, like globalization, computerization, and the management revolution, appears first as a way of doing odd jobs cheaply. For those on efficiency's receiving end, it is a threat."[26] However, the drive for efficiency has also paid to string 12 million miles of optical fiber in the

23 Thomas Stewart. "Welcome to the Revolution." In D.S. Albert, Papp, D.S. (eds). *The Information Age: An Anthology on Its Impact and Consequences.* (New York: CRRP Series, 1997), 5.

24 Ibid, 5

25 Ibid, 7

26 Ibid, 11-2

U.S., and, long before any couch potato has ordered up video-on-demand, efficiency will pay for a lot more construction of the electronic superhighway, the infrastructure of the information economy.

The primary question is to delve into the query of who or what is responsible for the challenges and problems that are presented in an economy that is technologically driven. Regardless of how one chooses to answer, it is the case that the hoi-polloi are the ones. When a man loses his job or means of livelihood, he is not only alienated in Marxist praxis, but is open to social vices such as kidnapping, armed robbery, extortion, and the worst of all, an easy recruit for notorious terrorist cells like Al-Qaeda and ISIS.

It is the case that even when life under the information age has brought several conveniences, it has made man an enemy of himself. This is played out when a tiny fraction of humanity control the means and machines that now do the tasks that man needs to mix his labour with for subsistence. In the end man has been cast like a machine. To be used and tossed, as a means to an end. Given this malady, what is the way out?

This study proposes the categorical imperative of Immanuel Kant for a renewed interaction between humans and the machines. In order words, we shall be using the deontological ethics of Immanuel Kant to caution and bring about a peaceful co-existence between humanity and technology.

It would be worthwhile to state from the outset that Immanuel Kant's strand of ethics falls under that which is generally considered as Deontological ethics.[27] The roots of the word 'deontology' can be found in the Greek words 'deon', *duty*, and 'logos', *science*. The best-known representative of deontological ethics is the German philosopher Immanuel Kant.[28] According to deontological ethics, some types of actions are prohibited, or obligatory, irrespective of their consequences.[29] While developing his ethics, Immanuel Kant begins by announcing, "two things fill the mind with constant awe and admiration – the starry heavens above and the moral law within."[30]

Kant seems to be of the view or perspective that the only thing good in all circumstances is goodwill. Kant furthers that "It is impossible to think of anything at all in the world, or indeed even beyond it that could

27 Tobjorn Tannsjo, *Understanding Ethics: An Introduction to Moral Theory,* (Edinburgh: Edinburgh University Press, 2002), 56.

28 Ibid, 56

29 Ibid, 56

30 Immanuel Kant, *Groundwork for the Metaphysics of Morals.* M. Gregor. (Trans). (Cambridge: Cambridge University Press, 1998).

be considered good without limitation except a goodwill."[31] There are imperatives that Kant employed to justify his ethics.

For Immanuel Kant "there is, therefore, only a single categorical imperative and it is this: act only in accordance with that maxim through which you can at the same time will that it become a universal law."[32] This is the first of the three imperatives. The point Kant makes in his presentation of the categorical imperative is that an act becomes imperative (or commanded) when it ought to be applied to everyone. Miller comments:

> [A] categorical imperative would command you to do X inasmuch as X is intrinsically right, that is, right in and of itself, aside from any other considerations—no "ifs," no conditions, no strings attached . . . a categorical imperative is unconditional (no "ifs") and independent of any things, circumstances, goals, or desires. It is for this reason that only a categorical imperative can be a universal and binding law, that is, a moral law, valid for all rational beings at all times.[33]

For Kant the source of moral justification is the categorical imperative. An imperative is said to be either hypothetical or categorical. Kant writes in this connection that:

> If now the action is good only as a means to something else, then the imperative is hypothetical; if it is conceived as good in itself and consequently as being necessarily the principle of a will which of itself conforms to reason, then it is categorical...[34]

One of Kant's maxims, germane to this discourse is the one: "So act that you use humanity, whether in your own person or in the person of any other, always at the same time as an end, never merely as a means."[35]

Kant thought that these and other formulations are equivalent. And from the categorical imperative he 'deduces' all sorts of moral duties, like, for instance, that it is always wrong to tell a lie, to kill, to commit suicide, or to break a promise. Therefore, he says that in order for an act to be categorically imperative, it must be thought to be good in itself and in conformity to reason. As a categorical imperative, it asks us whether we can "universalize" our actions, that is, whether it would be the case that others would act in accordance with the same rule in a similar circumstances.

31 Ibid, 7

32 Ibid, 31

33 E.L. Miller, *Questions that Matter: An Invitation to Philosophy.* (Colorado: McGraw Hill Inc, 1992), 462.

34 Immanuel Kant, "Good Will, Duty, and the Categorical Imperative." In A. Serafini (ed.) *Ethics and Social Concern.* (New York: Paragon House Publishers, 1989), 31.

35 Op. Cit, Kant 1998, 38

This is seen in Kant's statement about the categorical imperative: "Act only on that maxim whereby thou canst at the same time will that it should become a universal law."[36]

In summary, Immanuel Kant's meta-ethical system relies on the fundamental realization of the moral law that exists in the agent (subject). When we view the world (the object), we know a priori that morality is universal and necessary. In order to determine whether a particular act is good or bad, morally speaking, we must apply the categorical imperative. This imperative or command requires that we fulfil our duty in the circumstance the act is occurring in. The classification of the act rests on whether or not the underlying principle is a practical contradiction (antinomian). If it is not then the act is considered morally obligatory.[37]

When we consider the thought of Immanuel Kant with the attendant alienation of humans through the information revolution age, the impact of their ideas confronts us anew. Technologies are calculated to improve the lot of humanity but not to mitigate it. The present way of administering technology on humanity is the converse of the initial aim of technology. Kant would therefore recommend that we must always treat humans as ends but not as means. There is the need for technology to be reviewed along this line of thinking – no machine is worth more than the inconvenience of any human.

Conclusion

This essay has been able to show that whereas the information revolution has brought to human kind, a lot leverage that portrays the harnessing of the laws and workings of nature for the improvement of the species, it is the case that the dangers that are imposed and impacted on society by it are not easily wished away.[38] It is therefore apposite to tinker information revolution along the line of something that can or has the potency to make life challenging instead of alleviating not only for humanity but for the non-human world too. It is this challenge that a good and positive natured information revolution must evolve to acquit. For instance, in Nigeria, Joint Admission Matriculation Board (JAMB) sold her forms cheaper when it operated a manual registration process – that is a process that employed several hands for the task. However, with the introduction of machines and computerization, most of these hands were

36 Ibid, 31

37 S.L. Guttrie "Immanuel Kant and the Categorical Imperative." *The Examined Life On-Line Journal of Philosophy,* Volume II, Issue 7 2008, 6.

38 Emmanuel Ofuasia & Sonia Elizabeth Okogie-Ojieko. "A Further Reflection on Martin Heidegger's Meditation on Technology within 21st Century Mode of Being." *Philosophia: E-Journal of Philosophy and Culture.* Vol. 17 2017 pp. 41-2

'given the bullet', yet the price of registration forms soars every year, but efficiency remains ambivalent. It is therefore, the submission of this essay that information revolution must take cognizance of factors that promote harmony between persons and machines. It must be able to strike a balance such that the lives of humans would not be worse off than those who never witnessed the age of information revolution. This balance, we argue may be deduced from the imperatives of Kant.

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