

Being and Living in a Cyber-World

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Received: 19.01.2018 Accepted: 27.03.2018

Abstract- Advance technology is bringing novelties which have very important impacts on individuals, society and on the world. Information and communication technologies (ICTs) are being used almost in every domain of life, affecting the self-identity and social practices. There are new forms of life. The changes that new technologies created are so big which can be named as digital transformation. This transformation bears many opportunities, beside also ethical issues. Exponentially increasing improvements have the possibility to create a prosperous life for all, also to generate damaging consequences. Thus, potential side effects of development call upon the consideration and responsible behavior for all related parties.

Key Words- Technological innovations; ethical issues; human values; prospective future; new forms of life.

1. Introduction

Information and communication technologies (ICTs) have impacts on personal and social life at global level. Advance technology is being used almost in every domain of life including health care, education, business, communication; affecting individuals' identity, professional conduct, life styles, social relations and global interaction. The technological innovations are being realized in an accelerating pace. ICTs are growing exponentially. Novelties about artificial intelligence (AI) which is generally "...refers to the development of machines that perform tasks usually requiring human intelligence" [1] are actualizing more in shorter time periods since mid of last century. The speed of change and the social reality it created sometimes is allowing limited time to analyze the impacts as much as they have needed. Technological advance is offering great opportunities for humanity, but also poses risks, questions and hesitations. ICTs are pervasive and have global impacts on personal, social, cultural, economic and political domains of life. Beside ICTs, robots are taking place in social practice with more functions. All of these changes seem so effective to be articulated as transformation of humans' being and living.

2. New Concepts, New Facts, New Forms of Being, and Living

Technological improvements and change in communication are among the prominent factors of social change. Since 1950s, development rate of hardware and software in computer technology increased and societal impacts became apparent with the advent and broadening usage of Internet in the last decade of 20th century. Internet enabled individuals and organizations to communicate instantly, globally, interactively. Web 1.0 has provided with content through web pages; Web 2.0 has enabled users to generate content and Web 3.0 is known with semantic feature. All of these innovations brought big changes in almost every aspects of life. There are many new facts and concepts in our life, such as;

- Instant, intractive, global communication.
- Digital/ New/ Converging media (Convergence of text, photographs, audio and videos. Also, user participation in media content.).
- Video games which have personal, social and economic impacts.
- Big data. Refer the increasing volume of data.

- Internet of things. Implies the connection of objects to the Internet, operating with human's control or automatically under certain conditions.

Those novelties have affected the life of individuals at personal, societal and global level in a wide spectrum; brought new facilities, benefits and opportunities alongside the potential risks, threats and harms. Individuals have gained new tools for personal improvement. Interpersonal and interorganizational communication and interaction increased globally. This ability enabled collaborative work. Through this transformation, self-identity of humans also has been affected. Gergen explains the big changes in people's life, social relations and identities as referring the comparison between traditional face-to-face community and new pattern of lives in contemporary world where people have social relationships in electronic mode; points out that the increasing rate and expanding varieties of relationships which are not geographically confined today that are realized through and under effect of radio, television, newspaper, electronic mail, telephone, billboards as confronting many different persons in very short time periods [2]. That increased capability for social relations and interactions globally are bringing many opportunities. Nevertheless, high speed of life in conjunction with intense relations sometimes might not allow someone to hear own inner voice.

3. Ethical Dimensions of Digital Transformation

Technology is a tool and is expected that would be beneficial, an instrument for well-being of people, for happiness, a better life and a world for all. ICTs, through AI are offering many opportunities and improvements. Besides, some potential issues exist such as about human's identity, security, reality, accuracy, privacy, equal access to developments, employment, human's control on robotics. Also there are other questions and hesitations about robots. Another issue is related with being a "cyborg" –humanbeings with mechanical parts- which poses questions and concerns about the character, identity and sustainability of humanbeings and human values.

Norbert Wiener, in his deep analysis about communication, machines' capability in 1950s, had forecasts for future and he drew attention to risks beside the beneficial developments [3]. As Bynum articulated.

He predicted that, in our time, machines will join human beings in the creation and interpretation of messages and communications, and indeed in shaping the ties that bind society together. There will be, he argued, machines that learn – that gather, store and interpret information – that reason, make decisions, and take actions on the basis of the messages which they send and receive [4].

Wiener's foresight and analysis about social and ethical consequences of computer technology led to the foundation of computer ethics studies. Bynum explains that, "He developed strategies for analyzing, understanding, and

dealing with ICT-related social and ethical problems or opportunities that could threaten or advance human values like life, health, security, knowledge, freedom and happiness." [5].

Among the well-known computer technology experts Bill Joy explains the potential risks of robots such as self-replication and others, besides points and asks if human extinction is a possible risk while aiming longer lifetimes even immortality, whether we shouldn't proceed with great caution [6]. Besides, keeping the optimistic expectation, emphasizes that these developments open up the opportunity to completely redesign the world, for better or worse [7].

Society and technology have two way relationship; affect and shape each other. Johnson explains that "Computer and information technology is developed and used in a social context rich with moral, cultural, and political ideas." [8]. Thus, social, cultural, economic, political structures and constituents have impacts on the purpose and usage of technology. That impact is seen at macro and micro level. Johnson points out that,

Social context shapes the very character and direction of technological development. This is true at the macro level when we think about the development of computer and information technology over time. It is also true at the micro level when we focus on how specific applications are adopted and used at particular sites such as small businesses, college campuses, or government agencies. [9].

Since technology is designed, produced and used by people, it embodies human values. By this sense, awareness of the necessity and acquisition of fundamental human values and virtues are substantial. The purpose of technology production and usage have vital, crucial importance. Wiener stated that the danger of machine was not caused by machine itself but because of the human who has produced it [10]. Decision makers, technology designers, producers, also users have great responsibilities. Codes of conduct for professionals and ethical principles for all related parties provide essential statements. Among those, Asilomar AI Principles; comprising 3 topics as "Research Issues", "Ethics and Values", "Longer-term Issues" within 23 items, aim to be guidelines for AI development to offer opportunities to people in future [11]. Those guidelines are so important that create the potential and control mechanism to develop and use the technology for the benefit of humans, society and the world since the technology also affects the human's reflection, decisions and actions. As Johnson articulates,

Technology is a part of human activity. It makes a difference in the way we live and act, it shapes the moral issues we confront and the courses of action (the options) that are available to us, and it affects the decisions we make, individually and collectively. [12].

Perceptively in near future, will be more big changes in human life; personal and societal. Being as human and living in a world which are used to be seem will have great differences.

4. Prospectives on Personal, Social, Economic, Cultural Lives in Near Future

In near future, there seem that would be diverse forms and styles of life. Among those, two main separate living form of individuals come into focus; in the cities and in the countryside. It can be stated that both groups would use information and communication technologies; nevertheless more advance, diverse and multiple for urban lifes. Gradually, more and more people who are educated, had professions once and even a good standart of living in cities will migrate to smaller cities and rural areas. They will continue to use ICT but also will be more close to nature, will develop their relations with nature while aiming and constructing a prolific and happier life. They will aim to provide their needs themselves more; some of them will be seeding the plants, weaving, carpentering, cooking, and so on which have the probability to turn into commerce nationally and/or internationally also. Those people will have intractions with native/local inhabitants there, whom may teach new manners, knowledge and talents to them like how to raise or produce agricultural products. In this interaction, also locals in rural areas will gain intellectual accumulations of them who are educated, have different professions, knowledge about science, arts, technology, different geographies, cultures, languages. The people in rural areas who are using ICT will increase as user population, hopefully also will use these tools more effectively.

The people who live in the cities while having a life more likely in high buildings, among intense noise and traffic beside the many different opportunities will use more and more high technology products; more smart “things”; more smart houses, smart vehicles, smart phones or textiles and so on; renewing the current technological tools they used with different, advanced ones. Some people will be working in high technology firms or in different companies in manufacturing and service sectors of which many were already automatized, using robot technology or will use in near future. That process has two opposite sides; the optimistic one is lessening the heavy work of people, creating more time for leisure; the other side is to cause unemployment by time which is an important risk and problem psychologically, economically and socially.

Social practices will go on and will increase for some areas for both two groups such as communication, social media, e-commerce, home-offices, distance learning or teaching, electronic service transactions which are already being used. Prospectively, e-commerce will increase and concordantly logistics and transportation sectors will keep their importance besides will gain more. Mobility and home-offices will increase also. Accuracy and reliability of information, trust, privacy seem will be among the main issues and concerns. People will seek not only for reliable person but also institutional trust will be crucial as it is right now. Therefore, as an example, mass media and social media will

need to be established and confirmed by trusted individuals, professionals and institutions.

Among the important domains of life, healthcare is a vital one. Advanced technology is already being used for diagnosis and treatment. There seem, researches and innovations in this area will continue in a wide spectrum. Beside, as it can be observed today, the significance given to health by people is increasing. Henceforth, more reliable foods are being and will be more aimed to be consumed. In the meantime, people will give more importance to their freedom, happiness, peace and good relations with others whom they can trust and having good time together. In this regard, people will prefer to work with friends they can rely on, but also some of them will work with people who live in another place of the city or at a corner of the world whom they had never seen, beside with the possibility to meet each other from time to time in real life, in a physical office. Comfort will be seeked in office environment more. Entrepreneurship and creativeness will increase either in intellectual or physical production areas in connection with both the support and the opportunities of ICT and preferences of individuals. People today are and will be more able to show their talents, crafts, creations, products nationally and internationally along with the increasing capabilities of ICT and media. Entertainment which is another sector also will keep its importance in human life, both as producer or consumer.

More and more people now are and will be more mobile. Innovations and usage of mobile technologies will increase. In concordance with these; with the increasing need for travelling and trading; infra-structure construction like roads, harbors, airports and the transportation vehicle manufacturing and energy supply will be needed more. Another business sector which will need more attention to be customer communication / relations management on electronic environment which will not be satisfactory and sufficient only by electronic answer systems. People will require more “alive” response to their questions, demands and problems who they faced with the electronic service they use.

Other than these two groups of people, prospectively there might be two other groups at two opposite sites, maybe small percentages of world population, seem uncertain right now: There might be some people who will reject using the information and communication technologies totally, living more likely natural, isolated or relating with family members, close friends and other people around. On the other direction, probably there will be people who are related with very advanced technology such as either as space shuttle producer or user who might live in another planet or somewhere in space which is quite uncertain to foresee what kind of characteristics that will have for humans, for their “being” and “living”.

5. Conclusion

The analysis points out that the developments in technology are creating new ways of thinking, acting and new forms of life which can be called as transformation. This horizon has the probabilities of different perspectives which bear the benefits or risks. In this respect, if the universal communication can enhance international understanding and fundamental human values are adopted, then, with the advance power of technology, the world might be a peaceful, democratic, prosperous and happy place for all. Humanbeings have sufficient abilities, experiences, knowledge and insights to realize this.

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