

Digital Disconnection and The Distortion Of Human Intellect

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Abstract : One of the problems faced by humans in their evolution is the challenge of disconnection with the previous generation and the discontinuity due to scientific and material progress. The present age is called the digital age, starting from about 1970s with the advent of the personal computer and subsequent developments in technology which enabled transfer of information freely and quickly. This is the information age; the time period in which we live now where Internet and email are available is an example of the digital age. Such changes have been a little abrupt for the generations of humans not accustomed to such abrupt and dynamic changes in life. 'Everything is a click away' is the latest jargon among youngsters – particularly the teenagers. The progress of robotics and rocket sciences are phenomenal but the consequent thinking about mechanization of human lives to digital mode is something we need to think about now. While scientific progress for reducing human drudgery and effort is laudable, human interaction and contact in general, is missing. This evolution of technology in daily life and social organization has led to the fact that the modernization of information and

communication processes has become the driving force of social evolution. This article focuses on the human challenges of the disconnection i.e. irrelevance of what is being done today by tomorrow - the present and the future!

Keywords: Digital age, disconnection between the present and future, information technology and devices, human intellect and need for social contact., dynamic challenges and driving forces of social evolution.

INTRODUCTION

The fast pace of human development is not without its impact on Quality of life and societal adjustments to new forms of technology and the so called progress. While several innovations and inventions have made life more comfortable for humans all developments cannot be termed as beneficial for society at large. Digital platforms and mobile culture is here to stay, but overcrowding of devices and 'Apps' are making us think about appropriateness of different gadgets invented for human convenience. Some societies have serious reservations about

all that is termed as Mobile revolution and digital developments. 'Digital Life' as is advertised by several mobile companies have been attracting younger generation. They are nimble fingered and fast with the usage of mobile apps and devices of conveniences. However, one observation is that such a

development has also brought in certain amount of disconnect with members of society. More and more people like to shop without the actual feel of the product with touch or taste! The only advantage they see is convenience because of the lack of time due to the present day life styles.



Figure 1: DIGITAL AGE IN NDIA

The "mind workers" are able to compete successfully in the world market and receive high wages. Conversely, production workers and service workers in industrialized nations are unable to compete with workers in developing countries and either lose their jobs through outsourcing or are forced to accept wage cuts. In addition, the internet makes it possible for workers in developing countries to provide in-person services and compete directly

with their counterparts in other nations. This has had several major consequences, including increased opportunity in developing countries and the globalization of the workforce.

This development has reduced person to person human contact to the barest minimum (to say the least); at least that is how the older generation feels about this. While many youngsters are seen busy clicking their mobile devices and plugging their ears with the cables even

during the short walk to the bus station or the metro, the onlookers are confused and wonder what is happening! This article would attempt to understand the pros and cons of this developing phenomenon.

OBJECTIVES AND METHODOLOGY

The way of life has changed for humans for a long time now. Many of these changes have been evolutionary and generally appreciated as better for the conduct of day to day affairs. Humans have learned to cook food, dress, communicate and have a better social life. These changes are irreversible as you can see easily, but all along appreciated by majority of human race. Many technological developments ever since the invention of the wheel have enriched human life. Recent advancements in electronic and mobile devices have made us rethink about the direction of development and there is a great opportunity for course correction, rather than leaving it to a course of destruction of the human psyche and character! With this in background this research paper will try to evaluate and bring out the findings of the limited objectives as mentioned below:

1. Present and projected future directions of these developments
2. A critical appraisal of developments for enriching human lives.

3. A brief understanding and review of digital age A review of the critical impact and life changing effects of the mobile and internet technologies
4. A critical review of the Costs and Benefits of this change
5. Conclusions and suggestions

The topic itself selects the methodology. It concerns the digital progress of society, and so the data is derived from the digital media like the web pages and published reviews and literature on it. While the objectives are ambitious, every effort will be made to realize them through a comprehensive review and study of available published material in print, web and other appropriate electronic media. The objectives do not facilitate a Questionnaire method or survey, since difficulties will be encountered as whom to administer the Questionnaire and the Questionnaire itself becomes subjective! So, it was decided to contend with a comprehensive analysis of data available through published sources and evaluate the findings and arrive at answers to the above research questions. The availability of abundant sources of literature and material from World Wide Web and internet pages has made this attempt to look a little easier, but as the author progressed he found the navigation quite tough and stimulating intellectually. The Analysis of data and conclusions has been presented.

REVIEW OF LITERATURE

The course of life has changed over the last 50 years in a dynamic and no return way, i. e is at a faster pace than before. Life patterns are changing and it is difficult for the older generation in society to comprehend these. New fields of research have emerged and some of the themes for research include the relationship between human lives and changing society, interdependency of human lives and the timing of lives. Social research studies have mainly concentrated on two types of themes, one is traditional that studied inter generational differences, and the other more contemporary thinking about age.

The studies on life course paradigms have distinctly identified a notable decline in socialization. This has been a distinct frame work for research and along with the incorporation of other theories. Notably research studies are focusing on social changes and how developments in technology and communication devices are affecting social interaction.

The picture below almost summarizes the impact of modern technologies on human lives – particularly the mobile and data processing and nternet technologies. People are more and more self centered with actually no time for small talk or social interaction.



Figure 2: An illustrative example of impact of modern technologies in our lives

During a break, in a conference or seminar or meeting this is what most people do to catch up with their e-mails and office documents! Technology is impacting human lives in a serious manner and to a point of no return. One would imagine that these tools would have helped us gain understanding of

other cultures, meet and interact with people all over the world, maintain and strengthen family relations, communicate effectively with other people and help people become socially adaptable. But we see some technically well educated and versatile people have become distracted, overstressed and

increasingly isolated from realities of life. Though technology have enabled people to be more social the short term associations through the net have made them feel empty.

The Information Age has affected the workforce in that automation and computerization have resulted in higher productivity coupled with net job loss. Workers in developing countries have a competitive advantage that translates into increased opportunities and higher wages. The full impact on the workforce

in developing countries is complex and has downsides. In the past, the economic fate of workers was tied to the fate of national economies. For example, workers in the United States were once well paid in comparison to the workers in other countries. With the advent of the Information Age and improvements in communication, this is no longer the case. Because workers are forced to compete in a global job market, wages are less dependent on the success or failure of individual economies.



Figure 3: News travels faster in Information Age

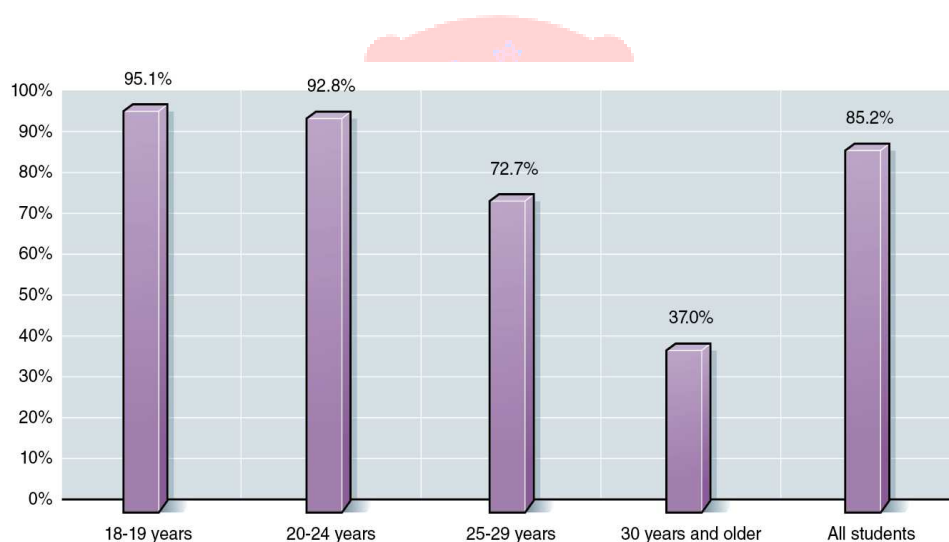
The Information Age has affected the workforce in that automation and computerization have resulted in higher productivity coupled with net job loss. In the United States for example, from January 1972 to August 2010, the number of people employed in manufacturing jobs fell from 17,500,000 to 11,500,000 while manufacturing value rose 270%. Although it initially appeared that job loss in the industrial sector might be partially offset by the rapid growth of jobs in the IT sector, the recession of March 2001 foreshadowed a

sharp drop in the number of jobs in the IT sector. This pattern of decrease in jobs continued until 2003. Industry is becoming more information-intensive and less labor and capital-intensive. This trend has important implications for the workforce; workers are becoming increasingly productive even as the value of their labor decreases. However, there are also important implications for capitalism itself; not only is the value of labor decreased, the value of capital is also diminished. In the classical model, investments in human capital and

financial capital are important predictors of the performance of a new venture.

Society is likely on the cusp of a social revolution, during which it will be important to redefine socially appropriate and acceptable behaviors (with regard to digital or virtual interaction). We are at a point in history where very few people have given critical thought to new social realities created by technology and what those realities mean for the individual and society. Closely examine a few social

technologies that influence leisure starting from virtual communities, social networking sites, and today's communication tools. A study of students and information technology found that 85 percent of undergraduates surveyed used social networking sites (Salaway et al., 2008) (see also figure 2). Many of the respondents in the study reported using such sites daily. Figure 8.3 indicates how undergraduate students use social networking sites. This report found indications that use of these sites is increasing yearly



Data from Salaway, Caruso, and Nelson 2008.

Figure 4: Percentage of students using networking sites

The use of social networking sites has both positive and negative consequences. It is amazing how someone can find a long-lost friend through a social networking site, enabling them to reconnect. In a society where people have become quite mobile

and family and friends are often geographically separated, it is convenient to keep in touch through technology. However, one need not look far to find problems associated with social networking sites. The usage pattern of internet mostly by students and teen agers show that they use it to

just stay in touch with so called ‘friends’ and exchange photos and videos. One can easily imagine the dangerous consequences of indiscrete social contact because of parental apathy!

Is the digitization of work ultimately good or bad for society? There are many aspects of digitally transformed work that can be considered good: increased mobility, less need of a dedicated work space, increased productivity from new tools and so on. One interesting development cited in the World Economic Forum’s Digital Media and Society report is that digitization has

enhanced the “flexibility for workers and employers, boosting productivity and enabling greater work-life integration”. But is greater work-life integration actually good for us? Does blurring the boundaries of private and professional life enhance societal values? Perhaps this works wonders on employee and corporate performance, but the implications on family life and health leans more to the negative side, in my opinion. In fact, our tendency as humans is to never really “disconnect” from our digital productivity tools, a behavior analogous with usage of digital media for personal reasons.

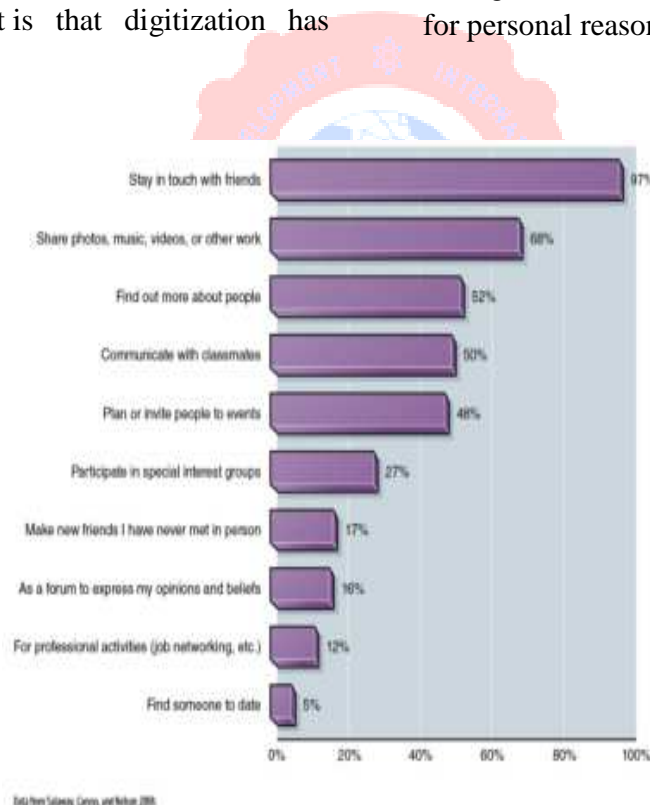


Figure 5: Internet Usage Pattern by youngsters (Largely without parental supervision)

Millions of consumers of digital media, entertainment and information have

found their lives revolutionized by the power at their fingertips and believe that

increased use of digital media has improved their lives, according to recent World Economic Forum research. From social networking to how we work, digital media is now integrated in much of what we do, improving our productivity and facilitating how we interact and communicate. Many studies have reported a gradual erosion of attention span with the usage of mobile devices. The list of positive and negative repercussions of increased digital media use is long. Are we doing enough, and more importantly, can we do more to foster the great things that come from digital media use while addressing the potential risks

Businesses have used technology to gain advantage over their competitors. If a

business uses technology to improve on its services or products, its customers will be impressed and they will become loyal to that business as well as invite more customers through word of mouth. Advanced technology can result into better customer service and production of high quality products or services. Business to consumer communication has been improved by use of technology. The information collected is used to improve on the services of the business which results into business growth. For example, businesses can use social Medias to hold product surveys. A business can use technology to recruit and train new employees. This simplifies the all process of hiring and it saves time. Even though we use technology to solve operational costs in business and increase on productivity it is quite expensive.



Figure 6: Confusion of Technology – but of joke

Now days most airlines use this virtual reality technology to train their pilots on how to react effectively in adverse conditions. For example, many pilots are faced with bad weather, and defective engines. The pilot will be presented with

the same challenge in a virtual reality world and they get training on how to overcome the challenge. The pilot in question has been exposed to a virtual life and if they do this for so long, it creates an imbalance in their life. They

find a problem of living the other virtual life to a real one. So they keep on getting flashbacks, eyestrain and simulator sickness. If you spend a lot of time in a virtual reality system that uses a low-resolution head set for displaying views, you may experience eyestrain issues. When the resolution is too low, your eyes are forced to work so hard to distinguish images.

With the introduction of genetically engineered crops, farmers' outputs have increased. Farmers have resorted to using chemicals and engineered fertilizers so that their plants grow faster. This has worked for the farmer in the short run, but after a while, the soil loses its natural fertility and the farmer will have to depend on artificial fertilizers which are expensive in the long run.

Banks have improved their services by using technology to introduce electronic banking. Customers can use online banking facilities to transfer money or get financial information, they can also use smart cards to withdraw or deposit money on their accounts. As we try to replace cash money with e-cash, we are faced with a problem of losing money very first. Why? E-cash is simply an electronic file, so this file can be interrupted across the network and you will lose your money in a second. Today there are so many hackers online monitoring these electronic file transfers,

though most merchants have formulated a trick of encrypting the files, but still these hackers find their way and access the data. Another loophole is the exposure of financial details to dangerous people. Most of this information is stored on our computers. However, when you connect to internet, your computer will be assigned with an IP Address, and an experienced hacker can access your computer via your IP and take advantage of all your financial details.

Reaction to Digital Proliferation

However, some businesses are completely buying into this and profiting from it. One café in Vancouver was specifically built to repel Wi-Fi and phone reception. The owner said "I think the proliferation of digital technology like smart phones has happened so fast that we haven't really had a chance to have a conversation about the etiquette or the ethics around their use." Customers reacted favorably and many more cafes with a similar approach are popping up. From Secret Cinema (which hermetically seals phones in bags to stop people recording the experience to later share outside of the event), to hotels free of Wi-Fi and cafes that encourage people to talk and relax away from their screens, tech is now a barrier that many are tearing down. Because only without it, do they become free to do what they want to do.



Figure 7: Digital Media in India

Rapid technological advancements like automation and digital technologies are set to affect careers of professionals in the coming years and will have a significant impact on job security, a report said. According to Simplilearn's State of India Technology Skills Report that compiled inputs from over 9,200 mid-level IT/ITeS professionals, over 60 per cent believe that rapid technology advancements are set to impact their careers by 2017-18. The World Economic Forum had also revealed that the Fourth Industrial Revolution is in progress and this development is expected to affect millions of jobs over the next 5-10 years. Around 62 per cent believe that the impact will be due to automation, artificial intelligence and digital technologies, 48 per cent believe the impact will be due to globalization and changing consumer perceptions, the

report that covered professionals working at tier-I & -II companies in Bangalore, Mumbai, New Delhi, Hyderabad, Chennai, Pune and Kolkata said. With regards to digital technologies and its impact on job security, nearly half (49 per cent) believe their job is at risk due to the change introduced by emerging technologies, 32 per cent believe they already have the skills to cope with change brought in by emerging technologies, while 19 per cent of IT professionals think it would not impact their careers.

DIGITAL TRANSFORMATION IN INDIA

The following pictures give an idea of the digital transformation taking place in India. The mobile, Tablet, Social media and internet users are growing in India.



Figure 8: Digital Transformation in India

The impact would be more prominent on low and middle skilled jobs, which are under threat of replacement; accordingly experts suggest regular up-skilling to improve job prospects. “More than 50 per cent of IT industry professionals believe that future growth is in emerging and new technology areas like cloud computing, big data, cyber security, data science and mobile and a vast majority of them are keen to upgrade their skills,” Simplilearn Chief Business Officer Kashyap Dalal said. Interestingly, 62 per cent did not invest into learning newer technologies in the last 12 months, however, going forward, more than 35 per cent respondents want to up-skill with online courses over the next 6 months and digital marketing, big data and analytics are some popular domains professionals want to build their skills.

Is the digitization of work ultimately good or bad for society? Now that’s a

loaded question. There are many aspects of digitally transformed work that can be considered good: increased mobility, less need of a dedicated work space, increased productivity from new tools: the list goes on. One interesting development cited in the World Economic Forum’s Digital Media and Society report is that digitization has enhanced the “flexibility for workers and employers, boosting productivity and enabling greater work-life integration”. But is greater work-life integration actually good for us? Does blurring the boundaries of private and professional life enhance society? Perhaps this works wonders on employee and corporate performance, but the implications on family life and health leans more to the negative side, in my opinion. In fact, our tendency as humans is to never really “disconnect” from our digital productivity tools, a behavior analogous

with use of digital media for personal reasons.



Figure 9: India's position in the digital world

A question that is more difficult to be answered is about the impacts that computers and communications might have on employment. The ability of computers and communications to perform routine tasks such as bookkeeping more rapidly than humans leads to concern that people will be replaced by computers and communications. The response to this argument is that even if computers and communications lead to the elimination of some workers, other jobs will be created, particularly for computer professionals, and that growth in output will increase overall employment. It is more likely that computers and communications will lead to changes in the types of workers needed for different occupations rather than to changes in total employment.

The rapid increase in computing and communications power has raised considerable concern about privacy both in the public and private sector. Decreases in the cost of data storage and information processing make it likely that it will become practicable for both government and private data-mining enterprises to collect detailed dossiers on all citizens. Nobody knows who currently collects data about individuals, how this data is used and shared or how this data might be misused. These concerns lower the consumers' trust in online institutions and communication and, thus, inhibit the development of electronic commerce.

It is popular wisdom that people today suffer information overload. A lot of the information available on the Internet is incomplete and even incorrect. People spend more and more of their time absorbing irrelevant information just because it is available and they think they should know about it. Therefore, it

must be studied how people assign credibility to the information they collect in order to invent and develop new

credibility systems to help consumers to manage the information overload.

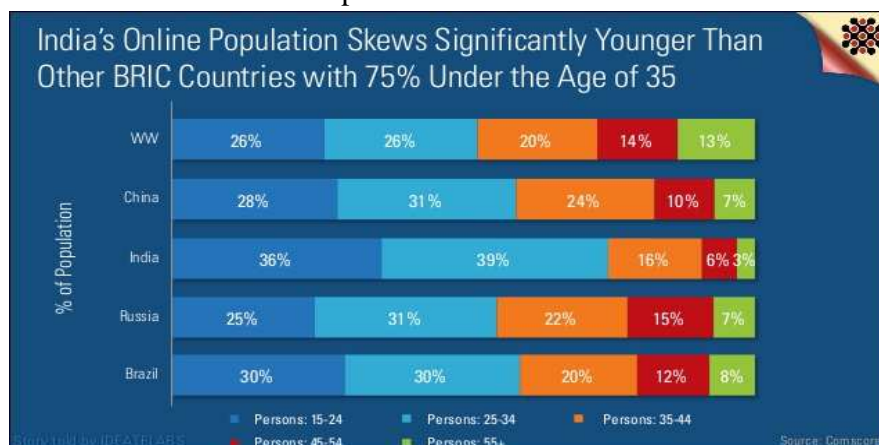


Figure 10: Online population in India



Figure 11: Highest Growth in Digital in India

The adaptation of digital media in India is progressing at a rapid pace! This is seen clearly from the Figure 10 and Figure 11 clearly. If one looks at the Demographic usage of Internet in India it would give a clear picture as to where

the wind is blowing! Obviously the younger generation of people i.e. in the age group of 16-35 years form 75% of the internet users. (See Figure 8)



Figure 12: Internet demographic in India

Technological progress inevitably creates dependence on technology. Indeed the creation of vital infrastructure ensures dependence on that infrastructure. As surely as the world is now dependent on its transport, telephone, and other infrastructures, it will be dependent on the emerging information infrastructure. Dependence on technology can bring risks. Failures in the technological infrastructure can cause the collapse of economic and social functionality. Black-outs of long-distance telephone service, credit data systems, electronic funds transfer systems, and other such vital communications and information processing services would undoubtedly cause widespread economic disruption. However, it is probably impossible to avoid technological dependence. In India, there is considerable progress, rather accelerated progress in the usage of media and internet etc. But this so called progress needs to be handled carefully, since the mobile culture and inter connectivity between devices is making them vulnerable for misuse!

Organizations have been trying to reduce their labor costs for decades, but something feels very different about the new Digital reality in which we operate. Many people thought the onset of web technologies would be the big game changer with how we utilized labor, but it actually increased our reliance of humans – many business processes became web-enabled, which necessitated training on new applications and helped us work more effectively – but they didn't fundamentally *change* how we operated – the web really just enabled us to run things the same way as previously, just with more global capabilities and much more efficient communication. It was this previous wave of Digital which really enabled the great outsourcing boom of the last 15 years, as communication costs plummeted and web applications made it possible to work with people anywhere/anytime. The initial web evolution helped globalize the workforce, but didn't have as much impact on how we could automate

processes, mine vast pools of data, leverage mobile applications to interact with our employees, partners and customers.

We have entered an era today where there is real capability to *change* how we run our businesses – from the back office processing to the front office customer interaction: we have tools and apps to target and interpret meaningful data, we have developing software solutions to automate and even robotize processes like we never could in the past and we have all submerged ourselves in a mobile culture where all forms of business are conducted on all types of devices and interfaces. Perhaps even more importantly, cloud-based platforms are being developed which allow us to share these capabilities, re-invent the way we run services and process transactions that require such a lesser amount of human intervention and oversight.



Figure 13: Summarizes the changes happening in the environment

It is apparent that technology has the potential to harm or enhance your social

skills and social life. The key is to analyze how technology affects you socially. Do technologies help you build positive, meaningful relationships, or do technologies hinder this process? Are you better able to communicate, listen, and share because of the technologies in your life? Do you use technologies to improve your relationships and build new ones? Are you letting a few choice people know who you are and what you contribute to this world, or are you merely distracting yourself with shallow pursuits? Does technology increase or decrease your concern for others, your compassion for others, and your desire to serve them? Such are the critical questions regarding technology and social development.

ANALYSIS AND CONCLUSION

The dynamic changes happening in front of our eyes have been truthfully recaptured in the above pages. One may argue that changes are the constant in life and so accept. Though this statement is true, one has to perhaps reflect and society at large has to decide the quantum and direction of this wholesale change in the living environment. Such changes are irreversible as we have already seen from the addiction of the young to apps of the modern age!

It has been seen from the data collected from published literature (mainly from the web pages) that adequate discussion is available on the digital progress. From

the day of industrial revolution, and particularly in the years following the 1970s the influence of digital media on the human activities is clearly visible. The progress of civilization has taught very valuable lessons to humans i.e. the most important being that the progress is irreversible! The progressive challenges of the environment have made humans adopt technologies, to start with to reduce the burden of human effort. With rapid advancement of technologies and the advent of computers, man found that time is the most important resource and it waits for no man! The competitive business pressures brought the concept of lean organizations and the need to speed up activities to catch up with the advancement of technologies.

The advancement of digital age has been accelerated by the need to find jobs for both the spouses and the consequent pressure on time! The new generation of people (say in the age group of 20-35) has become tech savvy i.e. they have mastered the art to using the computer, laptop, tablet and mobile with several apps concurrently to the extent that they will feel immobile without the prop of these aids! But such usage of technologies had the consequence of accelerating the obsolescence of even the digital aids like computers. More and more hand held devices and smaller and miniature equipments are in vogue. In advanced economies and countries, some of these developments have had negative consequences and they are going back to slowing down the pace of

human development so that human beings could have a person to person contact. An example is the development of cafes and coffee shops with blocking devices for the use of digital equipment to facilitate a person to person contact! This is because wherever the humans meet they do so with the digital aid plugged on to their ears! This has been found distracting and destructive by many human beings.

The cost and benefit have been evident and analyzed throughout the Data search and editing. Though it is difficult to take a rigid stand on these, the overwhelming conclusion and experience seem to be that we need to carefully consider future technologies. The *digital divide*, if I may call it so, is there for everyone to see. There appears to be no contact between generations of relatives in the same family like children and parents, not to speak of grand parents and uncles and aunts! The moment children are sixteen they seem to develop independence, of course abetted by some indulging parents, who do not have time to spend with their children, nor parents or other family members. This is a growing phenomenon in India and the experience elsewhere in the world is not different except that there is more awareness of this demographic exclusion!

Society needs to recognize these developments and decide what pace is good for them and what is not! It is a choice that the new generation has to make, while they are still in the

mesmerized world of digital aids and so disconnected from realities. Before it can be too late the younger generation has to decide what is best for them! In India, particularly in the middle income group, the parents belonging to the older generation have almost spent their life savings to make a good life and career for the sons and daughters of the family. It is sad to see that some of these parents are not adequately cared for and land in old age homes, without making a murmur.

FOOD FOR THOUGHT

It is very difficult to present any clear vision of the future of the digital present. Now we want to learn as much as possible, by doing research on the impact of electronic resources on people. If we are determined to keep existing standards and to develop new ones, we should be able to move data into newly designed systems without serious problems. If we participate in such advanced and complicated work, our institutions will not only survive, but they will also gain more prestige in the information age.

Guy Standing, a British economist and author of *The Precariat*, argues that globalization “commodifies” everything, increasing the number of people doing insecure forms of work. The work in whatever circumstances employers choose, create short-term jobs that lead to a short-term lifestyle with little hope of building a future or a career. In the

media and entertainment industry, we have seen the gradual erosion of premium content, so a similar effect on work and jobs could also be expected. Standing believes that because of its constant distractions, online connectivity conditions people towards a general short-term philosophy on life.

Half of us believe that increased use of digital media has improved our lives, according to recent World Economic Forum research. From social networking to how we work, digital media is now integrated in much of what we do, improving our productivity and facilitating how we interact and communicate. But at what cost? “The age of smart phones has left humans with such a short attention spans, even a goldfish can hold a thought for longer,” as per Leon Watson of *The Telegraph*. In 2010, another research team at the University of Michigan found a 40% decline in Empathy among college students, as compared to their counterparts 20 years earlier, with most of this decline coming after the year 2000.

Adaptation is the key, if you would not do that, you are not going to make it, Digital Transformation is the next key path to follow to be successful in the future.

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