The revolution of communication and its effect on our life

Gabor Vasmatics, Dipl.-Ing. University "Pavaresia" Vlorë

Abstract

The twentieth century brought about a lot of changes, especially in the fields of industry, information technology and communication. As a result of these phenomena also our everyday life has changed radically. In this article I would like to introduce that how did these new technological advancements affect the social life of humanity. In the beginning of history communication was totally limited by the distance. If someone was further than the other's noise or sight could reach, then they could not exchange any information without coming closer to each other. This way the people were more separated and the different nations were developing in very different ways. Through the appearance of the various communicational devices the distances were shorter and shorter, until that grade that nowadays we can hold and international conference with the participants being on distant locations of the world. Disabled people can work from their homes through internet. We don't need to go out even for shopping, because we can order the product and it comes to our home. Universities offer telecourses where people can receive not only the education but even a diploma, without ever setting foot in the building of the institution. The world truly became a global village, where we can reach anyone, anywhere, from the comfort of our sofa. All these changes in our lifestyle happened so rapidly that even my parents cannot really grasp it, not to mention about the grandparents. The last 20 years brought about so many new things that most of the people don't even know about their existence. The Homo Sapiens Sapiens evolved to Homo Sapiens Communicationis, with his inseparable tool: the mobile phone.

Introduction

Not so long ago the social activity of a family was to gather around the fire, and listen to the elder's story. Everyone was totally focused on the taleteller with opened eyes, ears and sometimes mouths. Nowadays this would be a bit different (if not impossible): having the family members time by time running out to answer calls, and the sound of the cricket being replaced by the sound of the mobile buttons while writing SMS. No more smoldering fire in the background, maximum the humming of the air condition would give some similar feeling. In fact the participants of the conversation don't even have to be any more in the same room – or same continent –, thanks to the video-conferencing. Parlor games are not anymore limited to the living room, we can play online with each-other. Unquestionably our life has changed radically, in every field.

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In this article I just would like to point out briefly the main changes in some areas, and more from the social and consequential than from the technical point of view. If someone is more interested about some part then following the references the research can go deeper and deeper, as much as the time and brain capacity allows it. But take care, because the amount of the information available on internet is as vast as the deep space.

How did it start?

Throughout history there have been lots of inventions which had deep impact on our life. In the field of communication these are the appearance of alphabet, the postal service, homing pigeons, newspaper, printing press, typewriter, photo, telegraph, fax machine, telephone, radio, television, etc. But none of these made such a big change in such a short time like the appearance of cell phones and internet. The mobiles – as we many times refer to them – made us truly mobile. Wherever we go we can be reachable and as it is often advertised "never lose anymore a …", and the sentence can continue with different words, like: call, message, meeting, etc.

All these new stuff were so exciting since the beginning, especially for the youth. And later on – either we realized or not – they became an inseparable part of our life. Even though some might have resisted in the beginning, and some still might want to resist and remain "uninfected" by the technology¹; but we can't escape from the wall-braking waves of development. While there are "only" 2 billion internet users around the world – according to internet world statistics² –, we have nearly 5 billion mobile subscriptions³, which is a very significant amount, knowing that there are altogether around 6.7 billion people⁴. Of course it doesn't mean that every single person who is not a baby or is not in coma has a mobile phone, but still it shows that it is an essential part of out life. I was even more shocked when I visited the website of real time world statistics⁵, where – at the time of my visiting – it was shown above 1.3 million cell phones sold and 112 billion email sent during the day.

So we have to admit that these two technologies brought an unprecedented technical revolution which transformed totally the whole world, independently on cultures, races, beliefs and ages. I know personally a native Indian who – besides keeping his traditions – is using email, even though he is older than even the concept of the internet, so we can't say that he uses it because he was born into. And he is just one from the many whose daily schedule has been changed by the arrival of this new age.

⁵ http://www.worldometers.info/

¹ http://www.800padutch.com/amish.shtml

² http://www.internetworldstats.com/stats.htm

³ http://reviews.cnet.com/8301-13970_7-10454065-78.html

⁴ http://www.google.com/search?q=world+population&ie=utf-8&oe=utf-8&aq=t&rls=org.mozilla:en-US:official&client=firefox-a

Daily life

Many of our fathers started the day with the reading of newspapers – some of them then used it also for an alternative purpose –, then they left to work. Nowadays the routine begins with checking emails and newsfeeds. The obsolete method is using a computer for this purpose; the truly modern people do it on their Smartphone or Pocket PC, while being on the way.

This revolution of communication actually brought the "Kingdom of Heaven" for the couch potatoes. There is no more need to get up for almost anything. We can order food, clothes, accessories, devices and even cleaning service through internet. Since wireless services are available, we don't need to worry about cables. Having a wireless enabled mobile device (phone, iPOD, iPAD, Sony PSP, etc.) can be enough to surf on the web, read news, communicate with others, work⁶ and play without even getting up from the sofa.

Work

I still remember when my mom was waiting at home for the phone call after the job interview. It was such a jumpy time. She couldn't really do anything else, just waiting, not going out in order not to miss it, mesmerizing the phone to ring, and so on. But this has changed since she has a mobile phone. She can go anywhere and still anytime she is reachable. Moreover at her last job she also had to open an email address and bought a pen drive to carry the materials. Even though she still doesn't know how to use by herself any of them, still she doesn't really mind about it as long as my brother helps her. She just knows that the little colorful plastic stuff can contain all her documents, and she can open them on any computer. No more need for a briefcase.

I think all of us have in memory the sight of circling the job advertisements in the newspaper. Well, that time is still not yet over fully, but it is disappearing slowly-slowly. Why, because it is much easier and much more comfortable to sign up on some web portals, fill out the forms, and then we just need to wait for the emails with the offers based on our fields of interest and educational level. No more need to tire our eyes and brain when the search engines can do the job quicker and more precisely.

Many different jobs can be done from home through internet, which doesn't really need more skills than to be able to read, speak and to click. One friend of mine after going on pension continued working that way. One company which deals with surveying hired her, their technician installed all the necessary software on her computer. She just needed to start it, then the program dialed one of the numbers from the database, and a question with some answer options appeared on her screen, which she just

⁶ http://www.worldwideworkathome.com/

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needed to read for the person on the other side of the call, and then select the answer, click on the next button, say goodbye and start again with the next one... Everything what she needed to say was on the screen from the greeting text until the finish line. Plus, whenever she wanted could take rest, have some food or drink or watch her favorite program on TV; she was her boss about organizing the working schedule. No one disturbed her as long as she fulfilled the requested number of interviews. Isn't it comfortable this way? It is very worth also for the company hiring people this way, because there is no need for a hall for the workers, no need for buying computers (the employees have one by themselves at their home) and no need even for a "real" office. The boss can also work from his or her home and lead the company online.

The use of computers helped a lot also about giving work to handicapped people. I saw once in a TV program a boy who didn't have arms, however he learned to type with his toes, so this way he got a job. In the movie titled Seven Pounds we can see a blind man who is working on a computer. With the help of a software the text shown on the screen is read aloud, this way making it "visible" for him. And this is not just in a movie, but it is the reality of today.

Business

Nowadays besides asking that where can we find a certain company in the city, we almost always ask also that where can we find it online. In this age a business can not be considered serious if it is not present also on internet, at least having an email address, but better to have website with lots of services available to the visitors. The importance of computer industry in business is clearly shown by that one of the richest people in the world is Bill Gates⁷, who made it through developing computer software.

School

When I was a child we were playing at school with matchbox, action figures and occasionally with bugs (we liked so much the mass flight of cockchafers). During the lectures we were chatting through little scraps of paper, which were sometimes intercepted by the teacher, who rewarded this action with punishment. When the Tetris became popular we just simply couldn't stand not playing with it during lectures, and in case if being unveiled the toy was confiscated. Besides studying this was our life in school. Since then the things changed a bit. The mobile phone became like indispensable equipment even in the primary school. Well, it is very useful, it has games, calculator, calendar and it makes possible to chat not only with the classmates but with anyone else in the world. The ace guy is not anymore that one who can spit further but the one who has the coolest gadget.

⁷ http://www.forbes.com/lists/2010/10/billionaires-2010_William-Gates-III_BH69.html

Besides all these things still the main focus about going to school is to be educated. Actually for this purpose we don't need to step out of our home anymore. There are plenty of different courses (language⁸, college⁹) available on the World Wide Web; furthermore at many of them we can even receive an accredited degree¹⁰. On top of all these, it is now possible also to get a so called "life experience degree"¹¹, for which it is not needed even to study or to do an examination, anyone can get it based on his or her life experience (hence the name). Just fill out the order form, pay the appropriate amount according to the level (from high school diploma to PhD degree with thesis is available), and the document will "come home" within 14 days. All these services are to help us to get more knowledge and to advance in our profession while we can be at home with the family.

The internet became an essential study tool, using services like Google¹² and Wikipedia¹³, where we can find almost anything what we are interested about. Before it was a privilege of the noble families to have a personal library at home. Now anyone can have access to the global one, wich is just a click away either at home or on the go.

Family life

During the 20th and 21st century we invented a lot of instant things: instant tee, instant coffee, instant soup, instant messaging, etc. Moreover we invented instant marriage: according to About.com, a cyber wedding requires only 10 minute¹⁴. Even though it is not yet considered as a legal one at the time of writing this article¹⁵, still it is very popular all over the world, among young and old as well. Many times it is just for fun, like in the case of the 12 year old Chinese boy, who almost caused a heart attack to his daddy when he mentioned on the phone that he has got married 3 times¹⁶. For some other people it can be something additional besides their "normal" wedding, either before or after. There are several possibilities about cyber chapels¹⁷, and as a memorandum the couple can get registered not only at the register office, but online too¹⁸, where a certificate is also available to make it look even more official. After they

⁸ http://www.word2word.com/course.html

⁹ http://www.onlinecollegecourses.com/

¹⁰ http://www.guidetoonlineschools.com/

¹¹ http://www.affordabledegrees.com/

¹² http://www.google.com/

¹³ http://www.wikipedia.org/

¹⁴ http://marriage.about.com/cs/cybermarriage/ht/cyberwed.htm

¹⁵ http://www.associatedcontent.com/article/1594721/cyber_marriage_how_to_get_married_on.html?cat=15

¹⁶ http://www.chinadaily.com.cn/english/doc/2004-03/19/content_316461.htm

¹⁷ http://weddings101.com/resources/Virtual_Wedding_Chapels/index.html

¹⁸ http://www.irom.org/

are done, they can start building their virtual family in a virtual life¹⁹, in case if they are not satisfied with their real life.

Religion

During the medieval times the Catholic Church officially persecuted, prosecuted and sometimes executed those who were dealing with anything which would bring scientific advancement that refute traditional beliefs, like that the world was flat and if we went too far we could fall into the eternal fire at the end of it. Since then not only them but most of the major religions became also technical, having their websites²⁰, and different online services: blogs, forums, stores, study materials, worships, etc.

Religious services are available also through mobiles. LG Electronics make phones which can indicate the direction of Mecca²¹, Verizon Wireless offers daily text message from the Pope²², Mauj Telecom launched a spiritual channel to perform prayer rituals²³. So the technical things are not any more considered as the tools of the evil, furthermore in the 21st century even the Pope himself "goes digital"²⁴.

Advertisement

Older times in the marketplace those could be more successful who could shout louder, they could reach out only those who could hear them. Then the appearance of leaflets, newspapers and TV added some more ways, but through the internet the advertiser can reach far more people than in any way ever before. First of all a website is needed which can also show up in web portals, then they can send newsletters in email (referring also there to the site) and they can sign up to some online advertising programs²⁵.

Either besides or independently from this, products can be sold through online markets, like Amazon²⁶ and eBay²⁷. Here people can sell and buy almost anything, some people even "sold" their lives there²⁸, however selling souls is not permitted²⁹.

¹⁹ http://secondlife.com/

²⁰ http://www.vatican.va/, http://www.buddhanet.net/, http://www.islam.com/, http://www.judaism.com/, http://www.hinduism.co.za/

 $^{^{21}\,}http://ae.lge.com/about/press_newsarchive/detail/NARCH|MENU_6041_1.jhtml$

²² http://www.highbeam.com/doc/1G1-115279918.html

²³ http://www.indiantelevision.com/headlines/y2k5/may/may191.htm

²⁴ http://www.reuters.com/article/idUSSYD19071020080507

²⁵ http://www.google.com/intl/en/ads/

²⁶ http://www.amazon.com/

²⁷ http://www.ebay.com/

²⁸ http://www.reuters.com/article/idUSSYD21931720080630

²⁹ http://abcnews.go.com/Technology/story?id=98892&page=1

The cheap possibility of email advertising gave rise to a very aggressive form, which is called spamming. To explain the meaning of it in a simplified way to non-technical people, it is like if someone tries to put a leaflet – which content is possibly undesired by the recipient – in everyone's mailbox in the whole world; and it might fall out from many, and the sender might not find every single mailbox, but still it can reach millions of homes, causing either inspiration or anger. Since in most cases it results in the latter, moreover it can cause losing working time when sorting it out (and time is money), in many states it is considered as an illegal activity³⁰ that can result in severe monetary penalty³¹. Then why are still people doing it? Because still it is worthy³². It is evidenced also by a study conducted by the University of Oxford and Purdue University³³. So as long as they have market, spam emails will be flourishing, no matter how much we personally might hate them.

Social networking

The modern versions of the "old-school" clubs are social networking sites. You might or might not need an invitation – depending on the certain site's rules – from an already member to become a member yourself too. In general these services don't require membership fee, because the provider has enough income from the advertisements shown to the users. These services became extremely popular in the recent years and it is hard to find people – among those who use internet services – who didn't subscribe to any of them. This subscription can be even without the conscientious thought of the person; from one side because of the aggressive characteristics of these sites (when someone signs up, it asks for his or her e-mail access to send automatic invitation to every contact who is not yet registered there), from the other side because of the carelessness of certain individuals, who just simply click on the sign up button in every e-mail which arrives in the mailbox.

There are dozens of such websites³⁴, and among them the most popular – according to several ranking sites³⁵ and the number facts³⁶ –, the top one is Facebook³⁷, with the most active users (over 500 million). The fact that only Facebook has more than 500 million active users (active means that they signed in at least once within the last 30 days) is quite terrifying. It means that nearly 10% of the population of the Earth

³⁰ http://spam.abuse.net/faq/

³¹ http://www.theregister.co.uk/2006/01/05/spam_fine/

³² http://www.pcworld.com/article/168534/spam_still_a_shoppers_paradise.html, http://www.businessweek.com/the_thread/blogspotting/archives/2009/10/spam_people_sti.html

³³ http://papers.ssrn.com/sol3/papers.cfm?%20abstract-id=920553

³⁴ http://en.wikipedia.org/wiki/List_of_social_networking_websites

³⁵ http://www.ebizmba.com/articles/social-networking-websites, http://social-networking-websites-review.toptenreviews. com/, http://www.selfgrowth.com/socialnetworkingwebsites.html

³⁶ http://www.facebook.com/press/info.php?statistics

³⁷ http://www.facebook.com/

uses their service. According to their statistics over 700 billion minutes are spent in a month on their site. This means that in a month with 30 days when used everyday then over 45 minutes is spent per user. That is already quite a considerable amount to assert that social networking became part of our everyday life, not to mention that they are just one from the many such services. And about the importance of their role in the life of the young ones can be more understood through Skyler's comment to her mom: "If you're not on myspace, you don't exist."³⁸

Besides the intended purposes the social networking sites are widely used in other ways as well, for example in court cases³⁹, finding lost family members⁴⁰, investigating about the employees⁴¹ or by the burglars for picking houses to rob⁴². So people should be more aware about what do they post there, because it might cause more harm than they would ever think. In order to help avoiding serious mistakes, the Consumer Reports Magazine posted an article⁴³ about what people should not do on Facebook, but these advices can be applied also to other social networking sites.

The "dark side"

The revolution in communication didn't bring only good things for us, but it also opened new ways for the "bad guys" to attack, steal, smuggle, etc. Using internet banking can be very comfortable, because we don't need to go out from home, looking for a parking place around the bank, waiting for the other customers to finish; we can check our balance or even send money right away from our computer. Even though the banks are trying their best to protect us through using secure pages, elaborate passwords, secure keyboard against keyloggers, TAN⁴⁴ and SMS verification; however nothing is 100% safe.

And not only about banking things is needed to take care on internet. We should be careful also about the websites we visit. There are plenty of them infected with harmful code which is waiting for the naive user to enter there, and in an instant the computer can be infected; and then it can become a "zombie"⁴⁵, and start harming others.

³⁸ http://headrush.typepad.com/creating_passionate_users/2006/03/ultrafast_relea.html

³⁹ http://www.flynews.com/2010/06/29/divorce-lawyers-using-facebook-to-collect-evidence.html

⁴⁰ http://www.usatoday.com/news/nation/2010-06-05-facebook-missing_N.htm

⁴¹ http://financialedge.investopedia.com/financial-edge/0410/6-Career-Killing-Facebook-Mistakes.aspx

⁴² http://bits.blogs.nytimes.com/2010/09/12/burglars-picked-houses-based-on-facebook-updates/

⁴³ http://www.consumerreports.org/cro/magazine-archive/2010/june/electronics-computers/social-insecurity/7-things-to-stopdoing-on-facebook/index.htm

⁴⁴ http://en.wikipedia.org/wiki/Transaction_authentication_number

⁴⁵ http://en.wikipedia.org/wiki/Zombie_computer

Since the appearance of operating systems on phones and other mobile devices, these gadgets are also vulnerable, and either they can just become annoying⁴⁶, or spender⁴⁷, or get totally under the control of the malicious software's creator⁴⁸.

Conclusion

So many changes came about in such a short time that we couldn't even really understand what happened to us. From one side our life became truly much more comfortable than ever before. We receive information (news, family photos, films, felicitation, etc.) faster and easier than ever before. We can shop online from the other side of the world and the product comes at our door.

Those who were far before came closer to each other ("We are living now in a global village"), we can reach anyone anywhere in an instant. But at the same time those who were near got further from each other, spouses spend more time on phone or on internet and less time together.

As in many cases, also here the coin has two sides. In our digital world today nearly all our data is stored on computers, and this way it is easy to access it in incredible speed; whether it is just a birth date, an address, a book, some multimedia content or bank account details. But this way it became somehow easier also for the bad guys to get them and at the same they can remain unrevealed, thanks to the characteristics of the internet. Information can be so valuable that it is "worthy" to steal it. So many inventions were made for this purpose and also many others to protect them. So it is a little bit like the fight between good and evil, and we just hope that the good side will win.

⁴⁶ http://www.tomsguide.com/us/iPhone-Virus-Rick-Roll-Astley,news-5059.html

⁴⁷ http://www.androiddevelopmenttalk.com/news/trojan-sending-sms-from-android-phones/

⁴⁸ http://www.tomshardware.com/news/iphone-virus-botnet-bank-details,9136.html