DIGITAL SKILLS FROM SILENT TO ALPHA GENERATION: AN OVERVIEW

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Abstract

In recent years, the rapid technological development has completely changed the ways in which people interact and communicate with each other. The new modes of communication allow individuals to interact at high speed and to establish contemporary and instantaneous relationships with more people. This is possible thanks to the technological supports that today, very often, mediate the social interaction between two or more people. Technological development has involved all ages from Silent Generation to Alpha Generation. In this article we want to analyze how the various generations perceive the technological development and how they evaluate the interaction with technologies, after having analyzed the different intrinsic characteristics that identify each person within the generation: the historical period in which they were born, behavior, values, education, job, current situation.

The research stems from a question: How do the various generations perceive human-technology interaction? This research question has generated two more questions: do the features of each generation affect the respective perception? Do the digital skills possessed by each generation change perception? Attempts have been made to solve these questions through a literature review within Google Scholar from 2005 to 2019 using the combined search’s terms different generations, technology, human-technology interaction and digital skills.

Knowing the digital skills of each generation and the modes of their interaction with technologies allows us to plan interventions, products, concrete actions favouring the centrality of the subject and his/her life’s quality.

Keywords: Human-technology interaction, Digital skills, Digital literacy, Technological interaction, Cohorts.

1 INTRODUCTION

Technological development has changed the ways in which people interact, communicate and exchange information with others. The new modes of communication allow people to interact at high speed and to establish simultaneous and instantaneous connections with many people. Such fast multi-interactions are possible thanks to the technologies that take on the role of relational mediator. New ways of interaction are involving and conditioning the entire life cycle, from the elderly to the infant, and are requesting new skills to the entire population that allow to get an appropriate and conscious use of the technologies: in Italy the 73.7% of families accesses internet via a device directly from home [1]. The new skills that people should have nowadays are part of digital skills: transversal and necessary skills that allow individuals to choose communication technologies to search and analyze data and information, to distinguish reliable information from those that need deepening, control and verification and to interact with different subjects in the world.

The Italian Ministry of Education, University and Research is overseeing numerous projects whose objective is the acquisition of these new skills, within Italian schools [2]. According to Calvani [3], the interaction between human mind and technological mediators can have a double outcome, positive or negative. The author underlines that in the situation where the technology repeatedly replaces the human being or where people makes excessive and unconscious use of it, even if an immediate satisfaction of the needs is obtained, there is the risk of impoverishing the person and the same interactions, contributing to the interruption of reflection. Instead, in the event that the person has full and conscious control over the technology by mastering the digital skills, it assumes the role of facilitator. This role allows people to maintain distant relationships with other individuals, to have instant feedback on the health status of family members, to be able to communicate simultaneously with more than two people, to be able to enhance and generalize social skills,... A facilitator who can improve the quality of life of the overall population. The centrality of people therefore plays a very important role, since there are many factors that influence the conscious and functional interaction with the various technologies:
the age of the people, their cultural level, the purpose of using the technological mediator, the type of device,... [4], [5] Several researchers have divided the population into groups of generation cohorts on the birth year and have tried to bring out the characteristics that unite people within these groups. The most current categorization was carried out by the scientists Botteri and Cremonesi [6], who believe that there are 6 generations. Each of them has different ways in relating to the world and therefore they will perceive this technological development differently.

In this paper it has been decided to carry out a review in literature that initially aims to analyze the studies on the definitions and methods of digital skills' evaluation, and the most recent and significant classifications of the generation, in relation to the generational profiles in which the researchers have included people. Finally, the articles that make the perception of the various generations with respect to this technological development and whether it's influenced by the generational profile and the skills possessed have been studied. It has been decided to carry out this research because it's believed that: the sharing of theoretical knowledge allows a job among different professionals; knowing the perception of people allows to promote the centrality of the subject and his/her quality of life both in the design of psycho-pedagogical interventions and in the creation of products in the corporate field.

2 METHODOLOGY

Between January and March 2019 it's been conducted a research at national and international level on the topic "generations and technologies" that arises from a question: How do the various generations perceive human-technology interaction? This question has generated two more questions: do the features of each generation affect the respective perception? Do the digital skills possessed by each generation change perception?

These questions were attempted to respond through a literature review in the Google Scholar database by choosing two key words: "different generations" and "digital skills" that could allow a preliminary research to be carried out in order to better define the research field and bring out the underlying theories. Subsequently, free terms were chosen: "technology" and "human interaction", to be combined with the key words through the Boolean operators AND and IN in order to carry out a complete and relevant research on the topic. Furthermore, the criteria of exclusion and inclusion have been developed for the publications: the search was carried out excluding languages other than Italian and English, excluding content published before 2005 and excluding items not available free of charge. On the contrary, in the preliminary research were included: the minimum 4 generation classification and comparison, the presence of common indicators for each generation for "different generations"; the definition, the dimensions and the competence assessment model for "Digital skills". As for the combined analysis of keywords and free terms: the presence of studies that had analyzed the interaction between generations and technologies and digital skills. After this initial phase of shared research design, the publications in the Google Scholar database that didn’t meet the exclusion criteria for both keywords and combined terms were discarded. Then the abstracts have been analyzed and the publications that did not take into account the inclusion criteria have been eliminated. Subsequently the complete texts of the remaining publications have been read and a further selection was made. And for the accepted studies, the contents and the points of correlation and non-correlation of the data have been analyzed in the light of our topic and the research question.

3 RESULTS

The selection, carried out according on the criteria of inclusion and exclusion criteria, the analysis of the contents and the correlation of the data present in the publications, has led to the inclusion of 20 articles. These articles have been divided according to keywords and combinations of them with free terms, in this way: n° 2 publications for the "digital skills" (Table 1), n° 4 for the "different generation" (Table 2) and for the phase of the combination we consider more inclusive n° 14 (Table 3).

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. Carretero, R. Vuorikari &amp; Y. Punie</td>
<td>DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use.</td>
<td>2017</td>
</tr>
</tbody>
</table>
### Table 2. Literature Review for “different generations”

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. B. Berkup</td>
<td>Working with generations X and Y in generation Z period: Management of different generations in business life</td>
<td>2014</td>
</tr>
<tr>
<td>T. Hernaus &amp; N. Pološki Vokic</td>
<td>Work design for different generational cohorts: Determining common and idiosyncratic job characteristics.</td>
<td>2014</td>
</tr>
<tr>
<td>D. Velički, V. Velički</td>
<td>Characteristics and particularities of educating the net-generation</td>
<td>2015</td>
</tr>
<tr>
<td>T. Botteri, G. Cremonesi</td>
<td>Millennials e oltre! Nuove generazioni e paradigmi manageriali.</td>
<td>2019</td>
</tr>
</tbody>
</table>

### Table 3. Literature Review for combined analysis

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year of publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. Goldenberg</td>
<td>The consumer of the future</td>
<td>2005</td>
</tr>
<tr>
<td>D. Oblinger, J. Oblinger</td>
<td>It is age or iT: First steps towards understanding the net generation</td>
<td>2005</td>
</tr>
<tr>
<td>E. Risi</td>
<td>Vecchie generazioni e nuovi media</td>
<td>2007</td>
</tr>
<tr>
<td>J.M. Twenge</td>
<td>Generational changes and their impact in the classroom: Teaching generation me.</td>
<td>2009</td>
</tr>
<tr>
<td>E. Behrstock-Sherrate &amp; J. Coggshall</td>
<td>Realizing the promise of Generation</td>
<td>2010</td>
</tr>
<tr>
<td>M. Rogers</td>
<td>Technology and baby boomers</td>
<td>2010</td>
</tr>
<tr>
<td>M. Madden, A. Lenhart, M. Duggan, S. Cortesi &amp; U. Gasser</td>
<td>Teens and Technology 2013</td>
<td>2013</td>
</tr>
<tr>
<td>M. Kubiato</td>
<td>The comparison of different age groups on the attitudes and use of ICT</td>
<td>2013</td>
</tr>
<tr>
<td>M. Van Volkom, J.C. Stapley, &amp; J. Malter</td>
<td>Use and perception of technology: Sex and generational differences in a community sample</td>
<td>2013</td>
</tr>
<tr>
<td>A. Kiser, R. Washington</td>
<td>The Information Gap amongst the Generations and the Implications for Organizations</td>
<td>2015</td>
</tr>
<tr>
<td>D. Velički, V. Velički</td>
<td>Characteristics and particularities of educating the net-generation</td>
<td>2015</td>
</tr>
<tr>
<td>S. Pieroni</td>
<td>Evoluzione Tecnologica: Generazioni a confronto.</td>
<td>2017</td>
</tr>
<tr>
<td>R. Iannone, R. Gurashi, I. Iannuzzi, M. Sessa</td>
<td>The smart home in the mind and in the practice of digital natives</td>
<td>2018</td>
</tr>
<tr>
<td>P. Gallina</td>
<td>La mente liquida: come le macchine condizionano, modificano o potenziano il cervello.</td>
<td>2019</td>
</tr>
</tbody>
</table>

From the analysis of all the publications it emerges first and foremost that digital skills represent a necessary skill both at a cultural and working level. The multidimensionality of this competence requires a shared and common theoretical dimension that different professionals must have in the technological field and related digital skills. In this regard it’s believed that the two most complete theories are those of the scholars Calvani A., Fini A., Ranieri M. [7] and those of Carretero, Vuorikari, Punie [8]. The first group of researchers believes that digital competence is the ability to know how to explore and deal with new technological situations in a flexible way, in knowing how to analyze selectively and critically evaluate data and information, in knowing how to make use of the technological potential for the representation and solution of problems and for the shared and collaborative construction of knowledge, maintaining an awareness of personal responsibility, of the boundary between oneself and others and respect for mutual rights / duties. Calvani, Fini and Ranieri tend to divide these skills into 4 different dimensions: technological dimension, the basic notions in the choice of technologies in a flexible way; cognitive dimension, access, evaluation and critical selection of data; ethical dimension, the ethical and correct use of technologies; integrated dimension, the creation of knowledge thanks to the use of technology. The second contribution concerning these
digital skills is DigComp 2.0 / 2.1 prepared by Carretero, Vuorikari, Punie [8]. Even for these authors, having digital skills appears as a continuum ranging from the acquisition of instrumental skills to the development of strategic skills, which allow the person to know how to distinguish the stable frame of reference from those that are more volatile or customizable components. Their model tends synthetically to bring out 5 different dimensions of competences: literacy on information and data; communication and collaboration; content creation; safety; problem solving. Both contributions have included the ways in which these skills can be evaluated and a scale of mastery of the dimensions of competence. It’s in fact believed that knowing how to identify the current development area of the person and his / her already possessed competences allows us to design inclusive paths and products that promote the potential development of the human being in these technological competences favoring his quality of life and its centrality [9]. In line with this statement, we have chosen to focus attention on the various generations that are present and socially active, initially going to analyze their most current classification in literature and then their intergenerational comparison on the basis of items shared by several authors. Regarding the classification of these generations, Botteri and Cremonesi scholars [6] believe that today there are 6 generations: Silent Generation or Traditionals (born 1925-1945), Baby Boomers (born 1946-1964), Generation X or Busters (born 1965-1980), Generation Y or Millennials (born 1981-1997), Generation Z or Digital Natives or Founders (born 1997-2010) and Alpha Generation or Screenagers or Net-generation (born after 2010). From the publications of SB Berkup [10], T. Hernaus and N. Pološki Vokic [11], D. Velički and V. Velički [12], T. Botteri and G. Cremonesi [6] showed that each generation has been analyzed first of all on the basis of age and subsequently of some characteristics: historical period, personal characteristics, ethics and values, work preferences, today (Table 4).

Table 4. Differences between generational cohorts

<table>
<thead>
<tr>
<th>Generation or Traditionals</th>
<th>Historical period</th>
<th>Personal characteristics</th>
<th>Ethics and Values</th>
<th>Work preferences</th>
<th>Today</th>
</tr>
</thead>
</table>
| Silent Generation or Traditionals | Great Depression and World War II | - Want to feel needed  
- Strive for financial security  
- "Waste not want not" attitude (Conservatism)  
- Simplicity, Patriotic, Patience,  
- High inter/intra-personal skills | - Traditional family values  
- Understands the nobility of sacrifice for the common good  
- Loyal to employers and expect the same in return | - Enjoy flexible arrangements so they can work on their own schedule  
- Believe promotions, raises, and recognition should come from job tenure  
- Measure work ethic on timeliness, productivity, and not drawing attention  
- Men typically worked while women stayed home to raise children | - Wealthiest generation  
- Majority are retirees |
| Baby Boomers | - Civil rights movement;  
- Feminist movement;  
- Environment movement  
- Cold War  
- Murder of JFK, Robert Kennedy and Martin Luther King  
- First man on the moon  
- Vietnam War  
- Protest and sit-in, Watergate  
- Nixon's resignation | - Assertive, casual, ambitious, individualist, experimentalist, independent  
- Optimists, but distrust of the government  
- Promotion of social causes | - Strong orientation towards work, career and political and civil commitment  
- Respect for family and religion | - "Workaholic", they hold positions of prestige, they have high incomes and great capacity to save  
- Professionalism is measured in hours worked and little in productivity  
- Team worker with co-workers  
- Medium-high education | - Generation with more people  
- Economically launched group  
- "Empty Nesters" |
| Generation X or Busters | - HIV disease  
- End of Cold War and Vietnam's War  
- Watergate  
- Nixon's resignation  
- Computer and MTV  
- Fall of the Berlin wall  
- Reaganism | - ambitious, self-sufficient, pursuing personal development, organized and multi-tasking, open to dialogue, tolerant towards differences, flexible but realistic, and rejecting the rules  
- defined as "nothings", but they need to control their lives | - Seek stability  
- a spirit of adaptation and responsibility  
- distrust in institutions, it's believed in people and not in the family  
- children must be self-sufficient | - informal and friendly  
- freedom and work flexibility  
- place where you can always learn  
- more quality, less quantity  
- communication regardless of position or title |
| --- | --- | --- | --- | --- |
| Generation Y or Millennials | - Technological development  
- Oklahoma bombing  
- OJ Simpson case  
- Death of Princess Diana  
- Y2K  
- Terrorism  
- suine flu | - the "mummy's boys" leave home late in life  
- concentrated on the present, hyper-connected, receptive and multitasking and possessing profound technological knowledge  
- have a visual approach rather than a textual one  
- accept diversity and work together  
- achieving goals in a short time and with people helping them  
- ambitious, optimistic, impatient, entrepreneurial, individualistic, informal  
- short attention and immediate gratification  
- be unique | - attentive to the image  
- they buy not to have, but to be  
- everyone wins! | - Accustomed to insecurity  
- the job is not aimed at salary, but they prefer to be remembered and make a difference  
- curious and open to new things  
- work is an opportunity to learn  
- work to live, rather than live to work |
| Generation Z or Digital Natives or Founders | - 11 September 2011  
- Great recession  
- Terrorism  
- suine flu  
- hurricane Katrina  
- iPod and Facebook  
- World Wide Web | - innovative choice  
- highly connected to communicate  
- immediate information (status on FB and/or Twitter) and little concern for privacy except for money  
- immediate and quick gratification  
- independent  
- they suffer from the fear of being excluded | - value to the family and to the elderly, but they challenge the traditional roles  
- unstable couple relations | - education and training through the use of social media  
- no team worker, but they will be very self-critical, they will process information at light speed thanks to cunning  
- turning passion into work | - multiracial  
- they will have to resolve the environmental, social and economic deterioration |
<table>
<thead>
<tr>
<th>Generation</th>
<th>today</th>
<th>- they pass the evolutionary stages</th>
<th>- longer students and independent adults later</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha o Screenagers o Net-generation</td>
<td>- the most experienced in technology</td>
<td>- look after their parents for a longer period of time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- they know perfectly how to use technology</td>
<td>- particularly demanding consumers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- possible dependence on the screens</td>
<td>- particularly unfaithful customers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- time spent on devices is greater than social time</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- virtual friendships</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- feeling of loneliness, despite the hyper-connection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: [10], [11], [12], [6]

Finally, from the analysis of the publications included in the combination of the keywords between them and with the free terms connected by the Boolean operators, the digital competences possessed by the people of the generations have emerged and their interaction with technology above all for the use of computer, smartphone, web, social media, ... As for the Silent Generation, a study conducted by Pieroni [13] reveals that 26.4% say they know how to use computers, 87% the smartphone. Risi [14] points out that the members of this generation perceive these technologies as useful and consider them an opportunity to promote social and relational life. The researcher adds that the use of the smartphone is limited to sending SMS or phone calls to 18% of respondents. Instead, according to the scholar Risi, the percentage of people who use PCs in life is higher and a large part of them have had to use it for work reasons. Regarding web browsing, despite an initial interest, they did not recognize its usefulness. Furthermore, from the analysis of the study it emerges that most of the people of this generation have approached the use of technologies through the study of books or training courses. The generation of Baby Boomers, on the other hand, presents greater digital skills, 53% know how to use smartphones also to access the Internet and 75% use Facebook (FB) via computer and / or tablet [15]. According to the analysis of the study carried out by Rogers M. [16] the Baby Boomers are a generation that is not at all uncomfortable with the new technology, although the perception of its use is less positive compared to young people [17]. In fact, they tend to be influenced more by online advertising than by traditional advertising, even if for purchases they prefer to put more trust in the advice of trusted people rather than testimonials on the web. The third generation is the Generation X or Busters, which have favored the development of the Web, from Google to Yahoo. They have a good knowledge of the computer, the tablet, the smartphone, ... The people of this generation tend to prefer Google as a source of information, to evaluate the quality of the products through the judgments of the communities, to use it for internet banking and for shopping. They prefer to disconnect after using various technologies [18]. Technology does not play a central role in their lives. The next generation is the Generation Y or Millennials which define the smartphone and the tablet as their compass, this device must guarantee a 24 h connection. From the studies analyzed by Twenge [19] the people of this generation spend 76% of their daily time on the internet on a mobile device every day and are able to read a lot of information quickly and use 3 screens (computers, smartphones and tablets) simultaneously. Their interaction with technology started very early, around 7 years old, as Goldenberg [20] and Kiser and Washington [21] claim, the people of this generation were born with computers in hand; for this reason their use has built a digital lifestyle: being active on the web, leaving reviews, sharing photos and videos, owning blogs. This generation uses technology to watch videos, train and learn about both education and work, be connected on social media, online games and music [22]. Members of this generation prefer to interact with other people through chats, such as Snapchat, rather than emails, of lower reply responsiveness [23]. According to the study by Kiser and Washington [21], it’s the generation that first prefers to use a technological mediator in relating to other people. The penultimate generation is the Z or Digital Natives or Founders who have digital skills far superior to the Millenials. Digital Natives are multi-tasking and can use 5 screens at a time (TV, mobile
phone, laptop computer, desktop computer, tablet). On average, the first approach to a technological device takes place as early as 7 years old, at 9 they get their first smartphone, tablet or personal PC up to adolescence, during which 75% have a smartphone, 79% a music device, 80% own game console, ... This generation is the first to interact with technology since childhood and in parallel with increasing age, the number of hours spent online is growing. Whatsapp and Instagram are the most used apps in the age group up to 13 years old, while Facebook is more widespread among adults. The guys of this generation don’t like to be traced and are jealous of their privacy, they communicate quickly through symbols (emoji, emoticons, stickers), photos and videos [24]. Finally, the most recent generation is the Alpha Generation or Screenages or Net-Generation. They are immersed in technology even before their birth, to the point of learning to turn on a smartphone, share photos and watch videos before learning to talk and walk. They prefer the use of tablets and smartphones. For the scholars Velički and Velički [11] this generation tends to prefer: quick reception of information, fast reactions, quick responses to stimuli, multitasking capabilities, ability to receive visual images and to link visual and spatial dimensions, obtaining information through hyperlinks rather than linearly, they are always online, inductive detection, willingness to try new things, prefer games, fantastical worlds, bets and interactivity with rapid feedback mechanisms, attention management, ability to quickly change topics but also the freedom of deciding which topics they will give their attention to. The market is very attentive to the demands of this generation so as to promote, specifically for this age group, the creation and sale of technological accessories (ipad BUDDIBOX) and numerous apps (ABCmouse). Finally, there are numerous influencer children and youngsters like Laerta, who already has more than 526,000 followers on her Instagram account after 4 years; Charli and Ashlee, 7 and 10 years old, from the Charlis CharlisCraftyKitchen kitchen channel have over 800,000 subscribers and an average of 29 million monthly views [25].

4 CONCLUSIONS

In this paper, thanks to the literature review, it has been shown how the various generations perceive the interaction as human-technologies and it emerged how the various digital skills possessed and the characteristics inherent in the different generations influence this perception and their relative use of the various technologies. Analysing the results transcribed within this paper, the importance of digital skills in national and international territory emerges, given that they are considered to be transversal skills and indispensable for personal development. Nowadays it’s urgent an appropriate definition of digital competences and a shared method of assessing them among the various professionals working with technology both at theoretical and practical level. It was necessary to include within this paper the most complete studies on digital skills in order to respond to this theoretical-methodological emergency, given that in this field of investigation, multi-disciplinary work is fundamental. In the wake of what has just been written, some studies have been included in the research carried out thanks to the second keyword, which attempt to create generation profiles within which the various people can be inserted. Also in this case it’s useful to have a classification because knowing the macro-characteristics allows us to promote the centrality of the human being and improve the quality of life. From the same studies it emerges that people change over time in relation to the period in which they were born, to the values, to the concepts of work. These differences greatly influence how social development is approached and in this case technological development. Knowing the characteristics of different generations allows us to understand the ways in which they perceive and react to these developments. From the analysis of the various studies, summarized in Table 4, these differences are clear: the conservative, patriotic Silent Generation, strongly anchored to family values and centered on job satisfaction, on sacrifice for the common good, on the centrality of man (the man works, while the woman stays at home to look after the children), then moves on to the Baby Boomers who despite being born a few years later tend to be much more ambitious, individualistic and independent of their predecessors. They are "Workaholics"; professionalism is measured by the amount of work hours and not by productivity. This last attitude is very different from Generation X or Busters, which tend instead to prefer quality over quantity of work; they also appear to be more unstable both in work and in the family as they pursue personal development, rejecting the rules and trying to gain control of their lives. The perceived instability experienced by this generation turns into insecurity for Generation Y or Millennials, who prefer to be centred on the present, they are more curious and open to new things, they see work as fun and they want to stand out from others. They are the first generation that tends not to deepen their choices and to request immediate gratification. In the wake of this generation follows the Generation Z or Digital Natives or Founders, who want to turn their passion into a job, they too seek immediate gratification and they are highly connected despite suffering the fear of being excluded. They are independent, self-critical and suffer from social instability in couple relationships.
Finally, we come to the analysis of the studies carried out with Alpha Generation or Screenagers or Net-generation, which pass all the evolutionary stages, spend more time on devices than social and/or family time. Adult independence will be considerably delayed due to the many years they will be studying. They have a greater sense of solitude despite the hyper-internet connection compared to the previous generation. Some scholars, regarding this generation, speak of a possible dependence of the screens.

Being aware of the publications that have tried to define and provide a way to evaluate digital skills and those that have written generation profiles has allowed us to have a shared theoretical basis to analyze the studies that tend to bring out the perception of each generation regarding technological development. In the part of analysis of the articles that have allowed to see the perception in this generation-technology interaction, the scarcity of studies carried out on the various typologies of technologies has limited the result. Most articles tend to analyze the perception and methods of use by the various generations with regards to computers, smartphones, the web and social media. From all the publications analyzed it emerges that technological development and its use are seen in a positive way: all generations agree on the usefulness and on the fact that it favors social life and relationships. What they change from generation to generation are the purpose and approach to this technological mediator: the Silent Generation sees it as a substitute for other objects, landline-smartphones, paper and pen-computers and have approached them for reasons working, in old age and through the study of books or courses; baby boomers know and use more devices than the previous generation and the aim is to search for items online without buying them. They approached these technologies to stay in touch with family and friends of long standing, especially if they were far away; the generation Y or Busters have favored the creation of the Web and for this reason they tend to browse the Web, in addition to the numerous devices, to obtain news and information on the objects. The technology for them represents an aid to everyday life, without centralizing one's life around it. The latter concept is instead different for the following generations: Generation Y or Millennials, Generation z or Digital Natives or Founders and Alpha Generation or Screenagers or Net-generation. They are organizing their lives with and thanks to technology: it’s noted that as the age decreases, the number of connection hours for the generations increases, the age at which use begins and the management of the same technologies in multitasking. Studies have shown that in all three generations the use of devices and internet connection is necessary and central in life.

In addition to the theoretical aspect, as far as digital skills and generational profiles are concerned, thanks to this paper we have tried to give a meaningful overview of how the interaction between the various generations of technologies is perceived and from the studies analyzed the remarkable influence exerted stands out, from the skills possessed and the characteristics of each generation. The potential of this paper is the presence of various professionals who have participated in the research precisely for the purpose of having shared lines that will be declined according to the corporate and training environment. It’s believed that knowing the perception of each generation regarding technologies allows to vary the ways in which to present training courses towards the use of new technologies and/or the creation of technological products: for Silent Generation the use of modalities is preferred paper or courses in presence, which is different for the three strongly connected generations where the use of social media or digital information is more successful. It’s believed that this research represents a starting point and that it would be useful for greater completeness to analyze the perception of the various generations for other technologies, such as Domotics, the Internet of Things, Robotics, ... Finally it would be interesting to expand the studies to include other languages in addition to Italian and English, in order to study whether the perception emerged from this paper corresponds with the new results, or whether points of discontinuity emerge.

REFERENCES


