

# Chapter 17

## The Net Generation

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### ABSTRACT

*This article reviewed Net Generation attributes and examined how these attributes are linked to cyber behavior. Net Geners are global citizens and emotionally open. They believe deeply that they have rights and freedom to information and learning. Being technologically savvy, they are natural collaborators in school projects, entertainment, and work. Net Geners are also prosumers, which means that aside from being frequent consumers, they can co-produce, and co-create contents, products, and services with interested parties. The ability to customize and personalize a product or an application is important to the Net Generation. Net Geners expect speed and instant gratifications in everything they do and are good at multitasking. The Net Generation is impatient, and Net Geners think that e-mails are too slow, as they are asynchronous. How these attributes are linked to Net Geners' learning, entertainment, and social relationships is discussed.*

### INTRODUCTION

The new digital media are at the heart of a culture and a grown-digital-generation that, in profound and fundamental ways, learns, works, plays, communicates, shops, and creates communities very differently than their parents did (Livingstone, 2002; Tapscott, 1998, 2009). This grown-digital-generation, the group following on the heels of Generation X, is often referred to as the Net Generation. In 2011, this generation comprises

adolescents and young adults between the ages of 14 and 34. In many ways, this generation feels more comfortable with computers than its parents do, so its members are more likely to be online consumers and users of social media such as Facebook, instant messengers (IM), blogs, and Twitter. Bombarded with information and being media savvy, this generation has grown up understanding the digital economy. More than any previous generation, this group is conversant with the communications revolution that is trans-

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forming business, education, health care, social relations, entertainment, government, and every other institution (Lenhart, Madden, Macgill, & Smith, 2007).

Previous research has estimated that this group represents 27 percent of the population of the United States (Tapscott, 2009), making it a consumer group that is potentially larger than that of the Baby Boomers. Net Geners are more numerous, more affluent, better educated, and more ethnically diverse than any other generation (Howe & Strauss, 2000). As the Internet is the medium of choice for the Net Geners, a better grasp on how the characteristics of this cohort are linked to their Internet behavior would help marketers and designers understand how to effectively use the medium. This article examines the Net Generation's attributes and the relationships between these attributes and their cyber behaviors, especially in learning, entertainment, and social relationships.

## OVERVIEW

One of the pioneers who proposed the concept of the Net Generation was Don Tapscott. In his book, *Growing up Digital: The Rise of the Net Generation* (1998), Tapscott characterized different generation cohorts primarily as Baby Boomer, Baby Bust, Echo Boomer, and the Net Generation (or sometimes called the Y Generation). A Baby Boomer is anyone born between 1946 and 1964, after the end of the Second World War, when the after-war economy was thriving once again. The Baby Boomers, representing 23 percent of the U.S. population, were the first generation raised with television.

Following the boom, birth rates fell dramatically, with 15 percent fewer babies born in the next 10 years (Tapscott, 1998). These babies were named "Baby Bust" or Generation X (i.e., those born between 1965 and 1976); the "X" stands for the feeling of being excluded from society and

less competitive in the job market. Given their media diet, Gen Xers are highly media-centered and regularly consume radio, TV, film, and the Internet. Now in their thirties and forties, and representing 15 percent of the population, the experiences of Generation X are good indicators of how the future generation will master the digital universe.

Next came the echo of the Baby Boom, or the Echo Boomer. Tapscott named this generation according to its defining characteristics, because, according to him, naming this generation according to the timeline, such as Millennials or Generation Y, diminished its importance in the larger scheme of things. Therefore, the term "Net Generation" (those born between 1977 and 1997) is the one that most precisely described this generation, as it was the first generation bathed in bits. The Net Generation differs from the boomers in various respects, like entertainment, study, consumption, work, and family values (Djamasbi, Siegel, & Tullis, 2010). It was tagged as a generation because its members grew up with the Internet; thus, they came to view such technology as part of their lives.

Finally, anyone born between January 1998 and the present, Tapscott called "Generation Next" or Generation Z. These are the digital children under 14 years of age, who represent 13.4 percent of the U.S. population. Like the Net Generation, Gen Zers are intensely technologically literate and heavily embedded in social media in everything they do (Leung, 2010; Leung & Lee, 2011).

A second pioneer in the study of the Net Generation is Sandra Calvert, the Chair and Professor of the Department of Psychology at Georgetown University and the Director of the Children's Digital Media Center funded by National Science Foundation in the United States. Her book, *Children's Journeys through the Information Age* (1999), addressed many of the issues surrounding our culture's continuing immersion in technology, looking particularly at how the emerging information technologies influence the Net Generation. Calvert raised questions about the effects

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of information technologies and discussed their meaning for parents, teachers, and policymakers. She indicated that gender, ethnic, and racial stereotypes are implicit in many computer games, which might have a profound influence on the Net Generation. Contrary to those who either idolize or demonize information technologies, in particular the Internet, her assessment is a more balanced recognition of its multifaceted potential to improve or impair Net Geners' lives.

In the year of the millennium, William Strauss and Neil Howe, two social historians known for their theory about a recurrent cycle of generations in American history, published a ground breaking book called *Millennials Rising: The Next Great Generation*. Strauss and Howe (2000) considered the Millennials as those born in 1982 or after. The book investigated the personality of the Millennial Generation currently coming of age, whose first cohorts were the high school graduating class of 2000. The authors argued that today's teenagers are recasting the image of youth from dejected and alienated to upbeat and engaged. Millennials have the capacity to become the next great generation, but in comparison to the older generations, they are often regarded as less creative, more dependent on peers, more spoiled, and unethical.

### CURRENT RESEARCH ON THE NET GENERATION

Ten years after the publication of the book *Growing up Digital: The Rise of the Net Generation*, Don Tapscott in 2009 described and comprehended new phenomena and trends in his second book on the Net Generation, *Grown up Digital: How the Net Generation is Changing Your World*. Tapscott (2009) pointed out that the Net Generation not only shops online and uses Wikipedia and Blackberries, but more importantly, does so with a natural affinity. Net Geners instinctively turn first to the Internet to communicate, understand, learn, and find entertainment. Tapscott also

identified the trend that the Net Generation has gone *global*. Net Geners are now equipped with digital products; for example, about 75 percent of high school students own a cellular phone and 73 percent of junior high school and high school students connect to the Internet at home (Beck & Wade, 2004). The global picture is more clearly drawn by considering countries like China, which has the largest number of netizens in the world, with 457 million as of 2010 (CNNIC, 2011). The Internet has a global reach, enabling global communication at the highest level; thus, it is no wonder that Net Geners are global citizens.

Meanwhile, in 2008, John Palfrey, director of Harvard's Berkman Center for Internet & Society, cooperated with Urs Gasser, a professor of law at the University of St. Gallen, to publish the book *Born Digital: Understanding the First Generation of Digital Natives*. Palfrey and Gasser (2008) suggested that the only world digital natives (a synonym for Net Geners) know is the digital one. Unlike prior generations, they grew up with tendencies to multitask, express themselves, and connect with others via digital technologies. They enjoy showing off and presenting their most innovative selves to the world. The book also tried to provide the parents and teachers of digital natives with adequate information about digital legal issues such as privacy, safety, file sharing, and overloading. In this critical but optimistic overview, Palfrey and Gasser (2009) shared their concerns about the legal and social ramifications of the Internet with regard to the Net Generation. In a wide-ranging examination of the future opportunities and challenges associated with the Internet as a social space, Palfrey and Gasser found that most Net Geners fail to recognize the vulnerability of the information that they post on the Internet, that is, that it is never really private, and suggested tactful parental and school oversight. Despite such concerns, the authors saw a bright future for the Internet in fostering "global citizens" with a spirit of innovation, entrepreneurship, and caring for society at large.

Sonia Livingstone, an expert on children, adolescents, and the Internet, is Professor of Social Psychology and Head of the Department of Media and Communications at the London School of Economics and Political Science. In *The International Handbook of Children, Media and Culture*, Livingstone and Kirsten (2008) explored how children today make use of different types of media, and how these media shape their lives. In another book, *Children and the Internet: Great Expectations and Challenging Realities*, which covers macro issues like the technology gap and political involvement and micro problems such as personality and family life, Livingstone (2009) provided a solid picture of both the benefits and risks that the Internet brings to the Net Generation.

## **NET GENERATION ATTRIBUTES**

Tapscott (1998, 2009) described the Net Generation as accepting of diversity, curious, assertive, and self-reliant. Consolidating his observations in his two books, we can summarize the Net Generation as having the following characteristics.

### **Global Orientation and Emotional Unconstraint**

Technology, especially the Internet, facilitates the ability of the Net Generation to talk with others around the world. Net Geners find it easier to expose their inner thoughts online, and the anonymity offered by the Internet allows them to express their feelings as much as they like. Social media such as Facebook, blogs, chat rooms, IM, and microblogs provide opportunities for this generation to exchange ideas with others without regard for ethnic or geographical boundaries.

### **Quest for Freedom**

“Yes we can” are three words that best describe the Net Generation, because Net Geners believe that they can do anything, as they have the freedom to try new and different things. The Internet has given them the freedom to choose what to buy, where to work, and when and where to talk to friends. Net Geners integrate their home and social lives with their work. Furthermore, they prefer flexible hours and compensation that is based on their performance and market value, not on how many hours they spend in the office. This results-only corporate culture lets the employees do their work anytime, anywhere, as long as they produce results. Today, the Net Generation is full of freedom of choice to meet their needs to work, shop, learn, and be entertained.

### **Right to Information and Learning**

With a strong belief in equal opportunity, Net Geners are staunch advocates of lifelong learning. They desire a good education, and they believe that access to information and the expression of opinions are fundamental rights. They understand that they need to update and maintain their training at the cutting edge to ensure their employability. The right to privacy and the right to speak out are equally important (Leung, 2003).

### **Collaboration**

The Net Generation is the relationship generation, and Net Geners are natural collaborators. They collaborate in multiuser online games, and they use chat rooms, e-mail, IM, and other social media to share files for school projects or just for fun. Besides collaboration in school, Net Geners bring a culture of collaboration with them to the work-

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place. They feel perfectly at ease communicating with their colleagues and clients using the latest online and mobile tools, such as the Blackberry, iPhone, and iPad, to discuss brands, products, and services. Net Geners are also prosumers. This means that they can co-produce and co-create contents, products, and services with interested parties because they can organize themselves into virtual communities. In the Web 2.0 era, Net Geners are creating advertising campaigns and designing products together in a receptive corporate culture by using collaborative tools such as Facebook, blogs, Wikis, and YouTube. Furthermore, in academic environments, Net Geners learn more by collaborating with others than by learning alone. They respond actively to this new model—student-focused-multi-way—of pedagogy.

### **Customization**

The ability to personalize a product is important to the Net Generation. Personalized online space is almost obligatory, and this may be considered a driving force to witness the popularity of sites such as Facebook and MySpace. Net Geners also customize their media. For example, they watch their favorite TV shows on demand, rather than at their time of broadcast. With YouTube, they can even watch a wide range of contents anytime and anywhere using mobile devices like iPads. The Net Generation has grown up with personalized cellular phones, podcasts, favorite websites, and TiVo to suit their personal needs and desires.

### **Entertainment**

Today, employers place great importance on attracting the brightest Net Geners that they can find. High tech companies such as Apple, Google, Facebook, and Microsoft, to name a few, have designed their work environments such that they look like playgrounds. Employees are encouraged to remain on the premises, as the company sites

are equipped with pool and ping pong tables, rock-climbing walls, a gym, a beach volleyball pit, swimming pools, and even childcare centers. Some companies offer free lunches on-site with diverse choices of ethnic foods. Moreover, Net Gener employees are allowed to bring their pets to work, and employees see nothing wrong with taking time out from their work to check their profile on Facebook or play a game online. Some argue that such a work arrangement is more productive than following the old paradigm of the nine-to-five work schedule at one's desk, because they can break for a few minutes to join in a multiplayer online game where they may be able to generate fresh product ideas and new ways to solve problems. Since Net Geners are good at multitasking, this relaxed and fun work environment causes them to see work as fun as well (Leung, 2003).

### **Instant Gratification**

Having grown up digital, Net Geners expect speed in everything they do. They expect video games to give them instant feedback, Google to provide answers within seconds, and e-mails and instant messages to receive prompt replies. If they do not receive responses instantly, they become irritated and may think that they are being ignored, particularly when they see that the recipient of their message is online. Net Geners are, thus, impatient and regard e-mail as being too slow, as it is asynchronous. With the remote control of computer mouse in their hand, they seek to obtain instant gratification, and whenever they find that the content does not meet their expectations, they change the channel or click to another webpage instantly.

### **Technologically Savvy**

Net Geners are immensely innovative and investigative. They have a passionate interest in how technology works. Accustomed to years of TV

channel and Internet surfing, they expect a world of almost limitless choices. The Net Generation has been raised in a culture of invention, where innovation takes place in real time (Hargittai, 2010). Net Geners replace their cellular phone every few months because the current one does not have the capability of the new one. They live to stay current, whether it is with their Blackberry, iPhone, iPod, iPad, or game console. They want to be envied, with a higher social status and positive self-image. As Net Geners have grown up in an era of constant innovation and change, they want their workplace, school, and ways to meet friends and maintain social relationships to be equally innovative and creative.

In light of these attributes of the Net Generation, this article explores how those characteristics are displayed in various domains of the Net Geners' lives, especially in learning, entertainment, and social relationships. As a popular medium for the Net Geners, in predicting their behaviors on the Internet, it is important to understand the psychology of the Net Generation, particularly its attributes, values, and media habits.

## **IN LEARNING**

The Net Generation has grown up with the convenience and efficiency of the Internet. Being global citizens and familiar with different media technologies in the Web 2.0 era, Net Geners can engage in customized and collaborative learning across national boundaries. Net Geners believe that the current education system is lagging behind because it was designed for the industrial age. Instead of focusing on the teacher, Net Geners prefer a student-centered education system that respects individuality and diverse ways of learning.

## **Interactive Learning**

The quest for freedom and the right to information are transforming education today, given that Net Geners have access to much of the world's knowledge at their fingertips. Learning now takes place when and where the learner wants it to, instead of in the traditional classroom. Previously, the teacher was the central figure of the classroom; he or she was the transmitter and the student was the receptor in the learning process. However, due to the fast development of the Internet, the ability to learn new things is more important than the ability to recite a textbook (Weiler, 2005). Therefore, Net Geners learn differently from their parents (Oliver & Goerke, 2007). One of the differences is that the Net Generation no longer treats teachers as the only source of knowledge. Instead, Net Geners generally turn to the Internet for more answers. Being technologically savvy, they discover the unknown by navigating the cyber world. As a result, compared with students learning in a conventional school, interactive learning tends to assist Net Geners in attaining a higher ability, more efficiency, and enthusiasm in learning (Barnes, Marateo, & Ferris, 2007; Warren, Hale, & Gifford, 1997).

## **Collective Learning**

Besides turning to the Internet for information, a recent study by Pew indicated that 64 percent of Net Geners engage in some form of content creation as well (Lenhart et al., 2007), of which Wikipedia is a classic example. As a global encyclopedia created and edited by contributors worldwide, it provides the Net Generation with a platform to practice collaboration. The Net Generation is mature enough to share many things online with

tens of millions of people, and often times, users get back more than they share. As a result of Net Geners' status as global citizens who hold the belief that access to information and learning are their fundamental rights, the one-size-fits-all school model is gradually being replaced by a one-size-fits-one way of teaching. Thus, students are interested in being engaged in interactive and collaborative learning. The ability to think and learn and find out things is more important than mastering a static body of knowledge.

*Internet literacy.* With its delight in discovering new information, the Net Generation loves to be immersed in digital technologies and to continually try new things. Net Geners usually learn at high speeds, as they can instantly and easily locate the facts that they seek and keep up with the most updated knowledge. However, the amount of knowledge that Net Geners acquire on the Internet is not as important as how information literate they are or how they navigate the digital ocean, and what they do with that information is what really matters. Information literacy, or Internet literacy, as it is sometimes referred to, encompasses a different domain of skills and knowledge from that involved in finding, retrieving, and using information (Johnson, 2008; Lanshear & Knobel, 2008). Research has indicated that while the Net Generation may be technologically literate, it lacks information literacy that goes beyond locating and using information, to the knowledge of how to interpret and critically evaluate it (Banta & Mzumara, 2004; Livingstone, 2008; Livingstone, Bober, & Helsper, 2005). To many educators, such skills can be regarded as the current form of literacy, wherein processing information in a digital environment is equally important, if not more important, than reading and writing were in previous decades (Murray, 2003). Leung and Lee (2011) also found that Internet literate Net Geners tend to be less likely to suffer from Internet risks such as being targets of harassment and unwelcome solicitation of personal or private information online.

## **IN ENTERTAINMENT**

### **Indoor Playing**

Baby Boomers used to play outside after school every day when they were growing up. Outdoor games, such as playing ball or climbing fences, were their favorite activities, and while enjoying these activities, they were hardly ever supervised by their parents. Yet when Baby Boomers became parents, they were surprised to find that most games were played indoors and, more specifically, were played online. Today, many video games are played on the Internet with multiplayer collaborations. New albums, fashions, movies, and lifestyle trends are identified first on friends' Facebook profiles. In fact, Net Geners are accustomed to individualizing their entertainment sources on the Internet so as to enjoy themselves to the maximum extent. The Internet, together with the cellular phone and WiFi, offers great convenience for such entertainment, especially in terms of instant gratification. Websites like Facebook and YouTube offer movie screens that allow online movie watching with diverse content. Search engines like Google and Yahoo provide music ranking and free downloads. If any content does not meet the user's expectations, he or she will choose another source at the click of a button. As for cellular phones, especially in Asia, over 90 percent of young consumers connect to the Internet through 3G phones, and more often than not, this technology is used to watch movies, listen to music, read novels, and play games to satisfy their ubiquitous lifestyles (Kharif, 2007).

### **Prosumer**

Currently, nearly 80 percent of Net Geners regularly visit blogs, and half of them write on their own blogs for fun (Lenhart et al., 2007). When social networking sites (SNS) like Facebook, MySpace, blogs, and Twitter emerged, Net Geners were even more encouraged by the websites'

functions and influenced by their peers to be both producers and consumers of user-generated content. In fact, nearly 75 percent of Net Geners believe that having fun with a product is as important as using it and that the most fun is had by contributing to it (Beck & Wade, 2004). Previous studies have demonstrated that generating content online significantly influences users' perceived psychological empowerment (Dobson, 2010). The more content users produce (such as on YouTube, Facebook, blogs, forums, and Wikipedia), the more self-efficacy and perceived competence they will exhibit (Leung, 2009).

## **IN RELATIONSHIPS**

### **With Family**

In contrast to the attitudes of Baby Boomers, who usually want to leave their parents, Net Geners feel happy and secure with their parents. According to a survey conducted in 2007 in the United States, 38 percent of 2006 college graduates were willing to live with their parents and two thirds chose to call their parents when they were in danger (Tapscott, 2009). In fact, digital technologies have brought families closer together, since Net Geners know the means that are available, cheaper, and most convenient for keeping in touch with loved ones. Thanks to cellular phones and the Internet, more than 80 percent of Net Geners speak to their parents frequently, and half see their parents daily. The perspective of the parents is the same; they want their children to answer whenever they call them. This started when globalization and the information technology revolution reached new levels. Thanks to cloud computing, robotics, 3G wireless connectivity, Skype, Facebook, Google, LinkedIn, Twitter, the iPad, and cheap Internet-enabled smartphones, the world has gone from connected to hyper-connected.

Tapscott (2009) described the Net Generation as being more willing to listen to their parents'

opinions concerning private decisions like which university to attend. Furthermore, Net Geners travel more frequently with their families. Meanwhile, the common adoption of personal computers and cellular phones might have also made Net Geners more independent, since they could easily keep secrets from their parents by customizing and privatizing their computer and cellular phone passwords. This is generally effective because parents are less competent with computers and the Internet, at least initially, and they are less likely to know what their Net Gener children are doing online.

### **With Colleagues**

As employees and managers, the Net Generation is approaching work collaboratively, collapsing the rigid hierarchy and forcing organizations to rethink how they recruit, compensate, develop, and supervise talent. The Net Generation brings challenges to the old human resources (HR) model. Instead of adopting traditional means of recruiting, training, supervising, and retaining, some companies now use Facebook and LinkedIn to interact with potential employees, apply game-based strategies to train new workers, create next generation collaborative work systems, and emotionally engage in helping newcomers work. In other words, employer-employee relations have changed.

As employees, Net Geners are sometimes misunderstood by their older managers and consequently regarded as lacking commitment to their jobs, because they expect a good balance between work and their personal lives. For Baby Boomers, there is a clear separation between entertainment time and work time. However, Net Geners believe that work should be fun and enjoyable. In some IT companies, such as Google and Apple, employees are allowed to bring their pets to work, and sometimes, the talented Net Geners like to play pranks, like uploading a self-made program to satirize their counterpart. In fact, Net Geners



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have grown up with a sense of individuality, from customized iPods to ringtones; thus, they want the manager-employee relationship to be simple and informal, and they want to be judged according to their performance, not their hours of labor. Individualized development opportunities are welcomed, together with open and direct discussions with their bosses and colleagues.

### **With Friends**

As Net Geners are familiar with making friends online and integrate these online relationships into their offline lives, their definition of “friends” might differ slightly from that of their parents. For Net Geners, a relationship may begin with a stranger on the Internet. The Internet is often used to encounter those we seldom contact offline or have never met before, which is known as a “weak-tie” (Granovetter, 1973). The weak-tie relationship reflects the fact that in contrast to earlier telephone communication, online communication (such as newsgroups, chat rooms, and more recently, SNS) provides public spaces on the Internet where people gather, meet, and talk regardless of physical distances. Consequently, Net Geners establish new friendships with very low costs and share aspects of themselves with Internet friends that they cannot, or do not, express to people in their daily offline lives (McKenna, 1999, p. 1). In other words, “friends” consist of not only people you have met, but also those offering you comfort and understanding from a faraway place. Indeed, Net Geners are globally oriented and emotionally open.

Due to the well-suited technology, SNS like Facebook support such social ties, allowing Net Geners to create and maintain larger social networks from which they can make use of better resources (Donath & boyd, 2004; Wellman, Haase, Witte, & Hampton, 2001). Donath and boyd (2004) hypothesized that SNS could greatly improve the weak-ties one can form and maintain, and Ellison, Steinfield, and Lampe (2007) accepted

this hypothesis. Apart from weak-tie relations, online communication has been viewed as an extension of offline activities, providing additional means of communication to face-to-face contact, because the Internet has been integrated into Net Geners’ overall lives (Leung, Fung, & Lee, 2009). Indeed, studies of geographical communities supported by online networks have concluded that computer-mediated interactions facilitate community involvement and social capital (Hampton & Wellman, 2003; Kavanaugh, Carroll, Rosson, Zin, & Reese, 2003). Given the convenience and affordability provided by technology, SNS are characterized by the fact that they offer a space where online and offline connections are closely coupled. As a result, Net Geners are likely to choose to maintain existing social relations online as a supplement to offline relations.

### **FUTURE RESEARCH DIRECTIONS**

Based on the research of Tapscott (1998, 2009) and others, this article summarized a number of the attributes of the Net Generation in the cyber age and provided an in-depth discussion as to how these attributes are linked to Net Geners’ learning, entertainment, and social relationships. However, this summary was by no means exhaustive. The attributes described above are by and large based on social and cultural values and lifestyles espoused by the West. Future research should consider local attributes to reflect the characteristics of the Net Generation in different cultures or conduct a focused cross-cultural study comparing differences in the distinct characteristics of the Net Generation between cultures. Furthermore, the emergent attributes may not be unique to the Net Generation; that is, the non-Net Generation could also possess these attributes. Future studies should explore the similarities and differences between the applications of these attributes among the Net Generation and other generations such as the Baby Boomers, Generation X, and Generation Z.

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