

Personality Traits of Digital Natives

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ABSTRACT

We live in an always-connected, digital age. Digitalization has accelerated exponentially, and companies' survival will depend on their ability to reshape their future. Those who are born after 1980 are called digital natives. Digital natives are assumed to be inherently technology-savvy. They have some peculiar characteristics which have attracted the attention of researchers. This paper presents some of those characteristics or personality traits.

KEYWORDS: *digital natives, digital immigrants, characteristics, personality traits*

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INTRODUCTION

Our society relies heavily on technology. Technology refers to the application of knowledge for human benefit. It provides us with the means to stay warm in cold weather, to communicate with a loved one a thousand miles away, to prevent or cure sickness, to care for those in need, to improve the quality of life, to increase happiness in many ways, to improve living standards, to reduce poverty, and to be connected globally [1].

The digital technologies (from email, file sharing, mobile phones, online gaming, ecommerce, Internet, GPS systems) in general and the Internet in particular are changing the way we live, work, learn, and socialize. It is exciting to see the Internet making the world a better place. The Internet revolution predominantly brought with it changes that were not only technological but societal and pervasive in scope. Technology is playing an increasing role in our culture in general and in young people in particular. These days, youths are bombarded daily by endless media messages. They are expected to learn and

apply skills that differ greatly from those for previous generations. They are called "digital natives" because of the seemingly effortless way they engage with all digital tools [2]. Digital natives live in the digital world and navigate it with their digital skills.

THE DIGITAL WORLD

Technology has spanned the globe, connecting device, and people of all nations. It has become integrated into personal, professional, and social aspects of our lives. In schools, workplaces, and communities around the world, technology is becoming increasingly embedded into daily tasks. Digital technologies are at the heart of our economic and social life. They have transformed everything from education and healthcare to social services. The marriage between digital technologies and demographics make the digital world inevitable. The digital world is real, and it exists today as their way of life [3]. Digital technologies affect all citizens in general and digital citizens in particular in the following ways.

1. Digital Government:

Government transcends all sectors in a given society. It provides the legal, political, and economic infrastructures to support other sectors of the society.

Digitalization of government services is motivated by the need to reduce costs and increase efficiency. Providing quality information and services to citizens is the goal of digital governments. Digital government, also known as e-government, is a global phenomenon whereby public servants leverage information and communication technology (ICT) to better serve their constituents. Digital government is the use of ICT (such as Internet and mobile devices) to enable government agencies to carry out their civic duties. It enables citizens to interact with the government and improves the services that governments offer their citizens. It has improved the access of citizens to services. It has made government to be more effective, accessible, and transparent [4].

2. Digital Citizenship:

Traditionally, citizenship involves nationally bounded membership. Citizenship is continually mediated by digital technologies. Government provides information online and obtains it from citizens online. Politicians interact with their members online. All these are aspects of the emerging digital citizenship. Digital citizenship involves acquiring skills to navigate and exist in the increasingly complex, digitally mediated world. It requires frequent home use of the Internet or frequent participation in web-based activities. Digital citizens share their creative ability using a wide range of digital tools and technologies. As the Internet is increasingly mobile, some digital citizens primarily rely smartphones to go on online [5]. Figure 1 illustrates some of what is expected of good digital citizens [6].



Figure 1 Expectations of good digital citizens [6].

3. Digital Law:

As governments and organizations around the world move their services and transactions online, there is the need for regulation. As more and more information is stored online and as more people are getting connected to the Internet than ever before, there should be law or data protection against unauthorized access. There has been rampant stealing of consumer data or information on the Internet. With the Internet ruling our lives, we need a cyber law that detects, prevents, and responds to cyber crimes. Cyber law or digital law governs cyber space, which includes the Internet, software, electronic devices, and ATM. It deals with what one should or should not do while using the Internet. It ensures your rights, safety, and security as you work online. Digital law is digital responsibility for actions and deeds online. It deals with issues on the intersection of law and the Internet. It involves legal topics such as intellectual property, copyright law, plagiarism, and freedom of speech [7].

4. Digital Rights and Responsibilities:

Every citizen needs to be made aware of his or her privileges and responsibilities in the digital world. Responsible usage of Internet based on the location (e.g. home/ office) and practices such as maintaining the originality of the content that is generated on the web, giving proper citations in the content, maintaining the confidentiality and privacy of data, incorporating encryption, e-signatures if required, etc. come under the purview of digital citizenship [8].

The key digital rights include [9]:

- Right to access and use computers and/or other electronic devices
- Right to access and use digital content
- Right to create and share digital media
- Right to privacy in digital communities
- Right to express your ideas and opinions freely
- Right to report anyone or anything that seems inappropriate

The key digital responsibilities include [9]:

- Use appropriate language and behavior when interacting with others (i.e. no cyber bullying)
- Respect the opinions and ideas of others
- Obey all intellectual property laws
- Do not use or share others' work without permission
- Follow rules and/or codes of conduct for every Internet site
- Responsibility to report cyber bullying, threats, and inappropriate use of digital resources

5. Digital Identity:

A digital identity or electronic identity is the digital representation of the information on a person, organization or object. It is the computer network equivalent to the real identity of a person or entity. It is information about a person, organization, or device used by computer networks to represent us. Digital identity is an emerging legal concept as a result of government services and businesses going online. It is responsible for the way government is providing essential information and services and interacting with its citizens. It is increasingly becoming significant from legal and commercial viewpoints as personal, legal, and commercial transactions are processed electronically. Like real identity, a person's digital identity may include username, passwords, date of birth, social security, and online search activities [10].

6. Digital Culture:

Without doubt, the new digital media are changing many aspects of the political, social, cultural, and economic lives of people around the globe. The digital culture is the mixing of culture and computer. It refers to practices and cultures emerging from digital technologies. Technologies are not just means of human connection, but an integral part of human exchange and communication process. Digital culture is the several ways people engage in digital media and technologies in their daily lives. Young people especially in the Western and urban areas have experienced the intersection of new media technologies and globalization. Digital culture has changed drastically over the past recent years. The amount of information required to be "literate" within a media-rich culture is changing [11].

7. Digital Literacy:

The word "literacy" refers to the ability to read and write. Traditional literacy is the ability to read and write in the shared language of a culture. To be digitally literate is to have access to a broad range of resources using digital tools. Digital literacy refers to a set of competencies that allow one to function and participate fully in a digital world. It refers to the ability to use the digital media such as a computer, tablet, smartphone, or the Internet. It requires two skills: digital skills and critical thinking skills. It means having the skills one needs to explore, create, and manage digital content. The skills should also help live, learn, and work in a society where communication is through digital technologies like Internet platforms, social media, and mobile devices. Digital literacy may be regarded as a fundamental right of all technology users [12].

8. Digital Divide:

In today's competitive, global economy, having physical access to information and communication technologies (ICT) and the Internet is a significant advantage. The ICT has created digital divide or digital inequality at both individual and global levels. Digital divide refers to the inequality of access to the Internet technology. It is about the disparity between the technological haves and have-nots. It has polarized society into two groups—those who have access to ICT and those who do not. At the individual level, digital divide refers to the gap

between information rich and poor. Some individuals have trouble catching up in the digital revolution. At the global level, developing nations are digitally disadvantaged countries. In the international context, digital divide refers to the divergence of Internet access between industrialized and developing nations [13].

9. Digital Safety:

Digital safety is a branch of cyber security that deals with people and the levels of online comfort, convenience, and privacy. It may be regarded as the act of staying safer online. This includes being aware of the risks associated with your online activity and avoiding being exposed to unwanted information, materials, or risks on the Internet that might harm one's devices. The Internet is a wonderful place for learning, socializing, and entertainment, but it is also the home to certain risks, such as malware, spam, and phishing. It can pose dangers if precautions are not taken. The Internet can be a risky place for children and their parents should have strategies for protecting them. As more and more children use the Internet in general and social media in particular, so do concerns about their online safety. Online safety or digital safety is becoming important, especially for children. Safety relates to a range of activities including online privacy, cyberbullying, exposure to violent content, contact with strangers online, and coarse language [14].

10. Digital Ethics:

Trust is very important as more and more individuals use the Internet and more and more companies move their data to the cloud. Digital ethics deals with how we conduct ourselves when we use digital media. It regards access to and use of digital technology as a fundamental human right in the global information society. In a hyper connected era, digital technology poses new challenges to standard moral problems.

Although there are several ethical problems associated with the rise of technology, the major issues include intellectual property, privacy, security, gender discrimination, digital divide, fair play/representation, computer crime, Internet addiction, software reliability, information overload, and surveillance. Digital ethics deals with the impact of digital technology on our society and how these issues are resolved [15].

11. Digital Games:

Entertainment or amusement is as old as human history and is a central part of human experience. The popularity of the Internet and digital media is making a significant impact in entertainment activities. The games industry is one of the most lucrative industries due to the billion dollar sales of digital games. Digital technologies have made digital games to become part of human culture. Digital games involve programming computers to play games. They have become the fastest growing section of the entertainment industry. Digital games are different from traditional games (such card or table top games) because digital games use digital technologies and are new. The majority of digital games players consist of male teenagers. Digital games offer them opportunity to take control over their own learning experience [16,17].

12. Social Media:

Traditional social media include written press, TV, and radio. Modern social media, also known as social networking, include Facebook, Twitter, Instagram, Pinterest, and YouTube. Both the traditional and modern social media are illustrated in Figure 2 [18]. Social media may be regarded as any website that provides a network of people with a place to make connections. It is a tool that helps individuals (consumers) to share ideas, content, thoughts, and relationships over the Internet. Digital natives have a deep affinity with social media. Social media has a great influence over an individual's daily life, and romantic relationship. The four most popular social media platforms are described here [19].

- **Facebook:** This is the most popular social media in the US and the rest of the world. It was launched on February 2004 by Mark Zuckerberg, Facebook can sensitize individuals (consumers) about many products and services. A chemical company can use Facebook to communicate their core values to a wide range of customers.
- **Twitter:** Twitter was launched on July 2006 to provide a microblogging service. It allows individuals and companies to post short messages, share content, and have conversations with other Twitter users. Many Twitter posts (or "tweets") focus on the minutiae of everyday life. Twitter posts show up instantly and can be read by absolutely anyone with an Internet connection.
- **LinkedIn:** This a networking website for the business community. It allows people to create professional profiles, post resumes, and communicate with other professionals. LinkedIn is where chemical manufacturers see the largest audiences.



Figure 2 Activities on the social media [18].

➤ **YouTube:** YouTube has established itself as social media. It was launched in May 2005. It allows individuals to watch and share videos. YouTube may serve as home to aspiring filmmakers who might not have industry connections. YouTube can be both a blessing and a curse for some companies.

Other social media include Instagram, Reddit, Pinterest, Flickr, Snapchat, WeChat, and Vine Camera.

CLASSIFICATION OF DIGITAL NATIVES

The current generation of young children has been described as “digital natives”, having been born into a ubiquitous digital media environment. Digital native refers to those who were born in the digital era, i.e., Generation X and younger. Prensky coined the phrase digital native in 2001. To avoid cultural conflicts, it is essential to differentiate between digital natives and digital immigrants, as illustrated in Figure 3 [20]. Prensky provides the following definitions [21]:

Digital Immigrant - A digital immigrant is an individual born before 1980 who had to learn technology almost like a second language.

Digital Native - A digital native is an individual born after 1980 immersed in technological lifestyle.

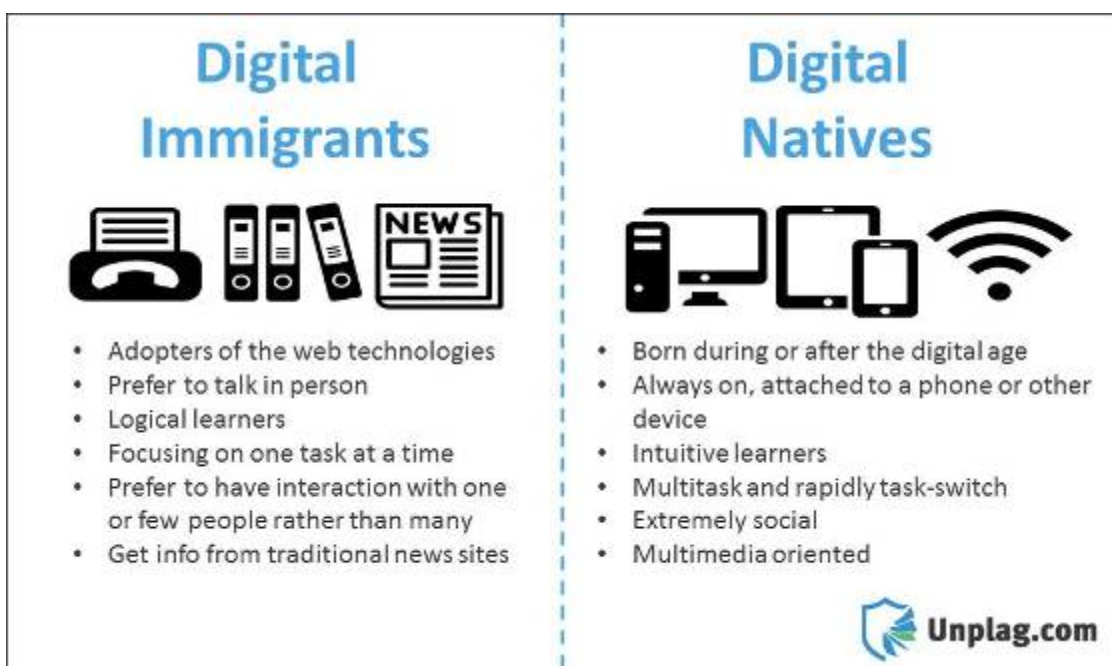


Figure 3 Comparing digital natives and digital immigrants [20].

Born into the digital world, digital natives have embraced the Internet, digital devices, and social media as they enter schools with technology as way of life. Digital immigrants are considered individuals who were born prior to the influx of technology, specifically computer use, the Internet, and smartphones. They are usually the parents, teachers, supervisors, and managers of digital natives. A digital divide has been looming over the relationships between digital natives and digital immigrants. The native/immigrant distinction can help explain tension between parents and children, educators and students, business management and younger employees, pastors, and youths, etc. The increased use of technology has widened the gap between those who have grown up with technology (digital natives) and those who have not (digital immigrants). The different lifestyles, values, and habits of the different groups create misunderstandings, misperceptions, miscommunication, conflict, disharmony, and tension. Digital natives who are now beginning to enter the workplace. They will become the knowledge workers of the future. Digital natives will over time become the dominant demographic globally.

The digital natives are diverse in terms of their attitudes and capacities regarding digital technologies. These differences may be age-related. Digital natives fall into the following major groups [22]:

- **Avoiders:** Some youths, even though they were born digital, do not feel an affinity for digital technologies. and, unlike most of their peers, they are not enamored by Facebook, texting or mobile technologies. These young people may not have an email, Facebook or Twitter account.
- **Minimalists:** These youths realize that technology is a part of today's world, but they engage with it minimally. Although they may have a Facebook account, they may check it only once a while. They are not to use eagle Google maps, Skype or a GPS system, but only when absolutely necessary.
- **Tourists:** These are the people who feel like visitors in the digital world. This group keeps distance from technology. This group stays internally non-digital in regard to preferences and values.
- **Enthusiastic Participants:** These make up most of the digital natives. They enjoy and thrive on technology and gadgets. They are online all day long or as much as possible. They participate in online discussions via Facebook, news sites, blogs or online education. When they want to know something, they quickly turn to Google. This group is harder to reach on the phone than via online methods and texting.
- **Digital Innovator:** This group consists of youths who are not only enthusiastic, but they work with technology to improve it, not just using it These are game developers, programmers, engineers, technology writers, professors, and hackers. Innovators build websites, create applications, and perform other online creation functions for their fellow innovators.
- **Digital Addicts:** Technology has the potential to become an idol, and its use can shape a person's thinking negatively. The tendency to idolize technology is a function of the disposition of the fallen human heart to turn from God. Digital natives are heavily dependent on technology to occupy their time. They include those whose physical, mental, emotional, educational, or occupational aspects of their lives are significantly, negatively affected by their excessive use of digital technologies. Examples of people in this group are gamers who play for 18 hours a day, missing school, workplace, and home life. Other members of this group include porn addicts who do not have sex with their spouses in favor of indulging this online addiction. Millions of young people all over the world are in this group - many of them gamers. Examples of digital natives are shown in Figure 4 [23].



Figure 4 Examples of digital natives [23].

CHARACTERISTICS OF DIGITAL NATIVES

The personality traits or behavioral characteristics of digital natives are exhibited in ways that often may be in contrast with other generations. Besides grouping the digital citizens are done above, they also have the following unique personality traits [24-31]:

1. Technology-driven Culture: Perhaps the most characteristic of digital natives is their native use of technology. The ubiquity of digital technology has significantly impacted the brain structure of digital natives, the way they think and learn, their spirituality, and their social skills. Digital natives have never known a world without the Internet and associated communication technologies. The technologies digital natives are associated with include computer, smartphones, iPads, and other handheld devices such as small, portable tablets, and literally all kinds of technology. Other devices include PlayStations, digital cameras, DVD players, and blog. These devices represent the communication and interactive tools used by digital natives to socialize and connect with online with their friends, family, and acquaintances. These digital devices as necessities to thrive in the digital world and global age. They form the most avid consumer group, worldwide, for technology-based products.

It is estimated that they have spent over 10,000 hours playing videogames, sent and received over 200,000 emails and instant messages, spent over 10,000 hours talking on cell phones, and over 20,000 hours watching television before they even graduate from college. A sociologist explores the many ways that young people's enchantment with digital devices is weakening their ties to people, places, jobs, and other stabilizing structures, and what that means for all of us. Time spent watching TV is associated with less time spent reading, ultimately leading to inferior educational outcomes.

2. Participatory Culture: Participatory culture is the norm for young people and digital natives are not inspired by passive learning. Digital natives learn via participation. They see the instruction to sit and receive as archaic. This creates predictable, serious problems between baby boomer or digital immigrant teachers, indicating that educational systems must change to catch up to modern times. It is time for more educators to change and adapt modern technologies so that the students are engaged and enthusiastic participants rather than reluctant, passive, unprepared-for-the-world learners. Digital natives have a permanent

identity on the Internet where they are consuming and producing content at the same time.

3. Learning Style: Digital natives are young, digitally-mined learners. They prefer to learn with the Internet, digital devices, social media, and digital games. Their lifestyles have challenged schools to re-examine the purpose of how learning should be conducted. Teachers and students struggle over the use of digital devices and technology in the classrooms. Prensky argued schools must pay attention to 21st -century students and seek to understand digital natives or face a future with disconnected learners. He argued that no longer can schools afford to neglect what he viewed as a shift in the kind of learning styles and learning experiences needed to support digital natives.

4. Multitasking: A common observation about the behavior of digital natives is their persistent tendency to multitask. The digital environment has produced individuals who are now accustomed to responding to multiple requests at once. The brains of digital natives have developed a high capacity to multitask. Multitasking in the digital native consists of not only doing a few tasks at once, but carrying the concept to new levels. A digital native may be observed doing multiple work tasks while listening to music on iPod, emailing, and doing their calculus. The interactive technologies allow individuals to be self-reliant, collaborative, and active participants in a game or conversation.

5. Mindset: Mindset may be regarded as the established set of attitudes held by someone.

It is safe to assume that individuals who grew up prior to the digital age would have a different mindset towards technology than those who grew up during the digital age.

Digital natives are commonly defined as being independent, open-minded, outspoken, and highly confident. They often view technology as being accessible to all and integrative into daily life.

6. Social Behavior: Social behavior refers to interactions between individuals or groups of individuals. Humans beings are well known to be inherently social. They have strong desires to forge and maintain relations through interactions with acquaintances, peers, friends, and other people. Such behavior is generally associated with enhanced psycho-social well-being and positive affective outcomes. Among digital natives, offline social behavior differs from online social behavior.

7. **Financially-Minded:** Financial mindedness is another core characteristic of digital natives. Because of their growing up in a digital world, they are prepared for their careers work with a different set of skill sets than previous generations. Digital natives are actually pretty savvy consumers. As consumers, the behavior of digital natives reflects their values and the influence of an increasingly digital world. Gen Z kids can rely on their tech savvy and extensive social networks to make informed purchasing decisions. They evaluate a range of options before settling on a product.
8. **Impatience:** Digital natives are notorious for their impatience. Tinder, Bumble, and other dating apps exist because they lack the patience of going through the hassle of going out and actually talking to people. The apps allow people to find the what they are looking for much quicker than normal. Some companies take advantage of their need for instant gratification. If you make your content easy to find, a dutiful digital native can find your content online.
9. **Adaptability:** Digital natives were born to adapt to change. This is an inevitable part of the digital world. They grew up around computers, phones, laptops, etc., allowing them to easily adapt to most technology. Digital natives are intuitively solving problems around the world. They are likely to navigate anything you put in front of them, and if they cannot, they will intuitively figure it out. Adaptability also comes in the form of convenience. They will readily download any new app makes their lives easier.
10. **Creativity:** Digital natives are creative in their ability to use technology due to their early exposure and familiarization. They bring a lot of relevant skills into the workplace. They are intuitively solving problems around the world. They can bring fresh points of view and ideas to a business. They are credited for noticeable contributions to the workplace. For example, digital natives are sometimes credited with making the push to adopt the cloud.

CONCLUSION

Technology has dramatically changed our homes and social lives. It is not only becoming omnipresent. Digital natives often view technology as being accessible to all and integrative into daily life. They have personal goals, priorities, values, and roles that differ greatly from previous generations. Some pursue their personal values like politics, education, and religion. Digital natives are young, digitally-minded learners. When digital natives are curious

about anything, the Internet is usually their first stop. Generally speaking, digital natives prefer to view visuals, videos, and games. Digital natives are willing to adapt to any new technology that adds value.

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