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# Acclimatizing To Digital Natives Environment In A Digital Era

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Abstract – This paper examined the acclimatizing extent of individuals to digital natives' environment in a digital era, it was aimed at checkmating the comparison between the adaptive nature of both digital natives and digital immigrants to the modern world as of today. To achieve this, four concepts relating to the variables were discussed and one theory reviewed. Some studies were also reviewed for further understanding of this adaptive gap. It was found out that the digital era is regarded as the environment originally prepared for digital natives and adaptation to it is very critical for survival globally. It was then concluded that the adaptive rate to the digital natives environment in the digital era is devoid on whether an individual falls into the category of digital natives or digital immigrants. It was then recommended amongst others that individuals of any society should properly get enough induction in the technological field so as to enable them be fully capable of utilizing technology to the fullest.; that the government should also ensure that there are enough centres for seminars on technological gadgets and its induction on the people of the society.

Keywords - Digital Era, Digital Natives, and Digital Immigrants

## I. INTRODUCTION

When comparing individuals born in the twentieth century to those born in the twenty-first century, there is a huge gap. This difference manifests itself in a variety of ways especially in usage and application of available technological tools but the one that is most concerning is the technological gap that exists between these two centuries, as well as the level of acceptance accorded to it. This difference in technology then significantly differentiates the way and manner in which individuals get to go about their various activities when it comes to effectiveness and efficiency. In comparison to the previous century, technology has now penetrated almost all sectors, if not all, of the economy. Almost all of the world's activities as we know them today have been dominated by the invention of technological gadgets, and this has in variable affected all spheres of life, is it the way we communicate, interact and send messages, do businesses, politics among others have been greatly affected. The presence of these technologies in every economy around the world has resulted in increased efficiency and effectiveness in the way things are done in society. It has resulted in a great deal of flexibility in the entire process of carrying out daily tasks and other life activities. Even with all of the advantages stacked in favor of economic technological innovations, there are still those who find it difficult to put them into action. The level of sophistication with which the economy operates in the modern era is thus viewed as a challenge to those individuals who have yet to fully adapt to the changes brought about by the full adoption of technology in this era.

It is widely assumed that in order to function effectively and efficiently in the digital era, some suitable digital skills must be acquired through proper induction in the field of technology. Thus, without proper induction into the digital world, many will be defaulted when it comes to actually utilizing technology for task execution.

Some may have attempted to carry out their daily activities in the manner in which they are accustomed, but the entire program cannot be overlooked. This is due to the fact that no matter which facets one chooses to delve into, there is still an iota of technology use present. As a result, it is critical for every individual, whether a digital migrant or a digital native, to develop technological skills.

This no doubt, is the whole intent of this paper. It aims to assess the extent to which people have come to terms with the ideology of incorporating technology into their various lives. It also includes the idea of defining the attributes that are associated with the sole purpose of adjusting to the various changes in the world of today as opposed to the world of the past.

## II. THEORETICAL FRAMEWORK

# **Instrumentalization Theory by Andrew Feenberg (2005)**

According to instrumentalization theory, technology must be examined on two levels: the level of our initial functional relationship to reality and the level of design and implementation. We seek and discover affordances that can be mobilized in devices and systems at the first level by de-contextualizing and reducing objects of experience to their useful properties. This entails a de-worlding process in which objects are extracted from their original contexts and subjected to analysis and manipulation, while subjects are positioned for distanced control. Modern societies are unique in that they de-world humans in order to subject them to technical action - we call this management - and in theoretically extending the basic gesture of de-worlding in technical disciplines that serve as the foundation for complex technical systems. At the second level, we present designs that can be integrated with other existing devices and systems, as well as with various social constraints such as ethical and aesthetic principles. The primary level simplifies objects in preparation for incorporation into a device, while the secondary level integrates the simplified objects into a natural and social environment. This entails a process that Heidegger refers to as "disclosure" or "revealing" of a world. Disclosing entails a complementary realization process that qualifies the original functionalization by orienting it toward a new world involving the same objects and subjects.

Analytically, these two levels are distinguished, regardless of how abstract the affordances identified at the primary level are, they carry social content from the secondary level in the basic contingencies of a particular approach to the materials. Similarly, secondary instrumentalizations such as design specifications assume that the affordances to be assembled and concretized have been identified. This is a critical point, cutting down a tree to make lumber and then using that lumber to build a house are not primary and secondary instrumentalizations, respectively.

Cutting down a tree "decontextualizes" it, but only in accordance with various technical, legal, and aesthetic considerations that determine what types of trees can become lumber of what size and shape, and are thus salable as such. As one would expect from an analytic distinction, the act of cutting down the tree is not simply "primary," but involves both levels.

However, the theory is complicated by the fact that technical devices and systems are constructed from simple elements with a wide range of potentialities. The process of combining these elements consists of successively imposing limitations on the materials. As the process progresses, secondary instrumentalizations become increasingly important. Consider the example of the tree and the house once more. Although secondary instrumentalizations limit the logger's output, it is far less so than the work of the carpenter who uses the logs after they have been turned into boards to build the house. The logger does not need to be familiar with the building codes, family structures, or architectural fashions that will eventually limit the carpenter's work. As a result, there is a dynamic process in which the materials and simpler technical elements are increasingly mediated.

This dynamic is particularly pronounced in differentiated modern societies. Some of the secondary instrumentalization functions are institutionally distinguished in particularly striking ways. Thus, an important secondary instrumentalization, aesthetics, can be separated out and assigned to a corporate "design division." Artists will then collaborate with engineers. This partial institutional separation of instrumentalization levels fosters the belief that they are completely distinct. This obscures the social nature of every technical act, including the work of engineers who are free of aesthetic considerations, if not many other social influences, because of their corporate environment.

The first level of analysis is inspired by categories proposed by Heidegger and other substantivist critics of technology. However, I believe I am able to avoid many of the problems associated with substantivism, particularly its anti-modernism, because I do not ontologize those categories or treat them as a complete account of the essence of technology. The empirical study of technology in the constructivist vein inspires the second level of analysis, interested in how actors interpret the meanings of the devices and systems they create and use. But, once again, I am selective in my use of this tradition. I reject its exaggerated and largely rhetorical empiricism, as well as its rejection of traditional social theory categories. Instead to incorporate its methodological insights into a broader theory of modernity.

#### III. CONCEPTUAL FRAMEWORK

# **Concept of Digital Era**

The word "digital" can be replaced with "modern," and thus can be said to imply the current globalized world in which we live. It is that era that has fully embraced technology's innovative intent across multiple sectors of the economy. It is also the era in which daily tasks are carried out with the assistance of technological devices. The Digital Era is a period in which the economy transitions from an industrial to an information-based one, with computers and other technological devices serving as the primary means of communication. Lau (2003) defined the digital era as a period in which there is widespread, ready, and easy access to, sharing of, and use of electronically accessible information.

In accordance with what these definitions have outlined as to what we mean by digital era, it is thus said to be that era in which electronic gadgets are used to carry out major activities in society on a daily basis. It can be said that this era represents a shift from the paradigm of going about activities manually to the technological implementation of these activities. Dholakia, Dholakia, and Park (2002), for example, focused on the impact of the internet on markets and compared it to the introduction of railways. The views of these authors in the exploration of the distinctive features that are present in the paradigm shift from the ancient era to the modern or digital era, it is clear that the modern era has brought about much flexibility in the old ways of doing things. This is also comparable to what has resulted in significant differences in the rate at which the world's nations' developmental rates are being realized. Though much has been said about the benefits of the innovative change in how things are done in the digital era, there are bound to be some drawbacks that can also be attributed to this era.

These concerns are also related to cyberterrorism. Cyberterrorism, as defined by Matusitz (2005), is the intentional use of computers, networks, and the public internet to cause destruction and harm for personal gain. This, among other things, can be compared to one of the negative issues that people in the digital era face as a result of the invention of technology.

# **Concept of Digital Immigrants**

This is the group of people who are migrating into the new world and have been rebranded by the concept of technology. They are seen as those who are attempting to integrate the idea or concept of actually implementing technologies for their daily tasks in comparison to how they have been doing it previously. Simply put, they are those who were not born in the modern era but are still alive to witness the entire transformation process that technology has brought about in society. When people are said to migrate from one location to another, they are referring to the same fabricated concept. As a result, digital immigrants can be defined as individuals who were not born in the digital era but are present in the era as we know it today.

Apart from referring to those who originated in the ancient era and have found themselves in the digital world, the term "digital immigrants" can also be used to refer to those who have yet to acquire or hone digital skills for the modern era. They are, in other words, those who find the concept of blending in a hindrance in the digital era where technology has taken over.

**Avoiders:** Among digital immigrants, we've all met avoiders. They prefer a lifestyle that is technologically agnostic or minimally technological. They usually have landlines, no cell phones, and no email. They do not Tweet or Facebook, which is highly illustrative of this group's view of the value of these activities. This category is primarily for those who intend to avoid using technology for any purpose.

#### **Reluctant Adopters**

This is the group of immigrants who recognize that technology is a part of today's world and try to engage with it, but it feels alien and unintuitive to them.

This group is diverse and likely includes the majority of digital immigrants. They may have a basic cell phone, but they avoid texting if at all possible. They may use Google on occasion, do not have a Facebook account, check their emails infrequently, and may have given up on online banking. This group is defined more by its cautious and tentative attitude toward digital technology than by its willingness to use it.

**Enthusiastic adopters**: These are digital immigrants who, due to their ease, capacity, and interest in using technology, have the potential to keep up with natives.

They could be high-tech executives, programmers, businesspeople, or others who embrace technology and are immersed in Internet culture. This group recognizes the importance of technology and strives to make the best use of it. Despite their status as digital immigrants, some members of this group - a very small number - are of the Bill Gates variety and have a talent for these things. Members of this group text, use Skype, have and use a Facebook account (recognizing that this is the best way to interact with their children in a preferred medium and reconnect with old friends), check email on a regular basis, and are enthusiastic about new gadgets and technological developments. If they are in business, they may also keep a blog and have a website.

## **Concept of Digital Natives**

When someone is referred to as a native of a place, that person is assumed to be from that location. The same ideology applies to those referred to as digital natives. These are people who were born during the digital era. That is, they were actually born in the midst of the world's digitalization. They are anticipated to be those individuals who have the ability to be digitalized as part of their birth rights.

The term "digital native" refers to people who were born in the digital era, i.e., Generation X and younger. This group is also known as the "i-Generation" or those who were born with "digital DNA." In contrast, the term "digital immigrant" refers to people who were born before 1964 and grew up in a pre-computer era.

In the same way that digital immigrants do, digital natives have categorical bounds that determine their level of acceptance of technology, despite being born in its age. This is to say that, despite being born in the technological age, digital natives are not fully accepting of the various changes that technology has brought to the world.

Zur and Zur (2011), justified this by categorizing this group of people into three groups as well:

**Avoiders:** Even though they were born digital, some young people do not have an affinity for digital technologies and, unlike the majority of their peers, are not enamored with Facebook, texting, or mobile technologies. Members of this small group of digital natives have a cell phone (it's almost cripplingly impractical not to these days), but no email, Facebook, or Twitter accounts, and may not even have home Internet access. They most likely have an older phone and don't text.

**Minimalists**: This is a category of digital natives who recognize that technology is a part of today's world and try to engage with it as little as possible and only when they believe it is necessary. They Google for information when necessary and only buy online if they cannot do so in a local store. While they may have a Facebook account, they may only check it once or twice a week. Instead of simply getting the address and looking it up on Google Maps, they will ask for directions to a friend's house. They will use Skype or a GPS system if absolutely necessary, but they are not eager to do so.

**Enthusiastic participants**: This refers to the digital natives who make up the majority of the digital natives. They are fascinated by and thrive on technology and gadgets. They interact on Facebook all day, many of them Tweet, and they are all online in some capacity (YouTube, online TV shows or movies, Facebook, surfing, etc.) all day or as much as possible. When they need to know something, such as a language translation, directions to a party, or how to spell a word, they go to Google first. This group is more difficult to reach by phone than by email or texting. They thrive on immediate, fluid communication and own a smartphone or i-Pad for constant Web access.

# IV. DISTINCTIONS BETWEEN DIGITAL IMMIGRANTS AND DIGITAL NATIVES

When distinctions are mentioned, we intend to identify those who are accredited to two or more entities. When there is a bid of comparison between digital migrants and digital natives, this is the case. Prensky (2001) popularized and elaborated on the terms "digital immigrants" and "digital natives," and Harding (2010), among others, questioned their validity and usefulness. In general, digital natives speak and breathe the computer language and web culture into which they were born, whereas digital immigrants will never deal with technology as naturally as those who grew up with it.

The way and manner in which both digital immigrants and digital natives use technology as a result of the extent to which they have acclimatized themselves to it can be further determined in categories, which were promptly assigned by Zur and Zur (2011) as follows:

**Avoider:** The Luddites are staunch opponents of modern technology. They use landlines and stay away from email and the Internet. The newspapers they like to read are delivered by snail mail, not by an Internet server. Some of the ultimate avoiders are

simply old digital immigrants who are unable to relate to modern technology, while others are digital natives who may be referred to as "Neo-Luddites" because they philosophically oppose the use of the Internet and other modern online technologies.

Minimalists are people who use technology with reluctance. They could be digital immigrants who are hesitant to adopt or digital natives who are minimalists. Minimalists have an email account and, more than likely, a Facebook profile (which is difficult to avoid these days), but they do not check them on a regular basis. They have a cellphone, but they don't need or want to use it to connect to the internet. This group does not require or desire smartphones. This group, like the avoiders, reads the newspaper on paper.

**Tourists:** These are people who perceive themselves as visitors in the digital world. They pay attention to the 'local' or 'native' digital culture, learning its language, rituals, and complexities. This group maintains an internal distance from technology, despite the fact that they use it appropriately and effectively when necessary, but not extensively. In terms of preferences and values, this group remains non-digital internally.

Adopters who are enthusiastic or eager: This group has a lot of fun with technology! They enjoy the latest iPhone and discuss its features; the i-Pad fascinates them even though they do not own one. If they do not own a new product, this group is ready and excited to try out a friend's product and enjoy the process. They engage in online discussions through Facebook, news sites, blogs, and online education. They may create their own online content (a column or a blog). Members of this group check email and are online throughout the day, are interested in technology, own a smartphone, and use Facebook. They get their news online rather than in print. Innovator Members of this group are not only enthusiastic, but they also work to improve technology. These individuals work as game developers, programmers, engineers, technology writers, professors, and (gasp) hackers. While hackers do not improve technology for the rest of us, they do have an impact on it. Innovators create websites, applications, and other online creation functions for their colleagues.

Over-User or Addict: As the name implies, digital addicts are overly reliant on technology to pass the time. This group includes millions of young people all over the world, many of whom are gamers. When digital immigrants are in this group, it is usually for gaming or porn, though social networking can also be used. Members of this group are fiercely protective of their "right" to be online and will become agitated, enraged, and even violent if technology is not available. This is the group that many parents, educators, and managers accuse ordinary digital natives of being, but this is incorrect. Addicts are people whose physical, mental, emotional, educational, or occupational lives have been significantly harmed by their excessive use of digital technologies. People in this category include gamers who play for 18 hours a day, missing school, work, and family life. Porn addicts who avoid having sex with their spouses in order to indulge in this online addiction are also members of this group.

# V. EMPIRICAL REVIEW

Cheta (2014) conducted a review on acclimating to a digital natives environment in developing countries. He claimed that, Information and Communication Technology (ICT) has succeeded in producing two generations within our school system: Digital Natives (DNs) and Digital Immigrants (DIs). Based on his findings, it was determined that DNs operate in a learner-centered environment, whereas Dls operate in a teacher-centered environment. He thus recommended, among other things, that now that the digital era has arrived, that such measures as; acceptance to innovation and change; DIs training with ICT; DIs owning personal PCs; DIs practicing with ICT; and DIs teaching/learning with ICT be implemented.

Ali (2018), investigated the impact of evolving technology on the emerging online lives of digital native university students in his study. He accomplished this by delving deeper into students' technological activities, and he plans to investigate the impact of evolving technology on the emerging online lives of digital native university students at a Fijian university. For the study, a survey research design was used. For data collection, a Likert type scale instrument was used. SPSS was used to analyze the data, and a thematic approach was used to discuss it.

It was revealed that young digital native university students were born in the digital age and have grown up appreciating the power of digital connectedness at an exponential rate in their daily lives. As a result, it was concluded that, the study's findings have implications for pedagogy and practice, as traditional approaches to teaching can be met with resistance and skepticism by millennials. Because digital natives are technologically savvy, it was suggested that technological tools be used to improve digital literacy and numeracy, resulting in a thriving digital economy.

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## VI. CONCLUSION

In light of what has been duly discussed and reviewed above, it is noteworthy to conclude that, the adaptive nature of individuals to the digital natives environment in the digital era does not fall under the category of either being a digital native or a digital immigrant.

#### RECOMMENDATIONS

As a result of the conclusions reached, it is necessary to recommend that: 1. Individuals in any society should receive adequate training in the technological field in order to be fully capable of utilizing technology to the fullest extent possible.

- 2. Individuals should not be discouraged if they are willing to engage in proper synergy with technological devices, regardless of whether they are digital natives or digital immigrants.
- 3. The government should also ensure that there are enough centers for seminars on technological gadgets and their introduction to society's members.

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