

# The Delineation of Civilization and Productivity in the Perspectives of Demographic Bonus and Generations Y and Z in Indonesia

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**Abstract**— A demographic transition illustrates the composition of population that is getting perfect indicated by the shifting of population structure from high rates of fertility and mortality to the development pattern of population with low rates of fertility and mortality. This paper aims to delineate civilization and productivity in the perspective of demographic bonus and the emergence of Generations Y and Z in Indonesia. The research method used in the study was qualitative descriptive, which was applied to analyse the origin of things related to the aspects of civilization, production, demographic bonus as well as the emergence of Generations Y and Z in the context of Indonesian nation-state life in the globalization era and the development of information technology. Study results indicate that the regeneration of human civilization is faced towards the development of Science and Technology and the globalization process. Generations Y and Z are the regeneration of civilization that both have chances to face the challenge of the era. Each civilization faces indecisions in welcoming the future. A system is required to adopt and put meanings on contemporary values prudently. The percentage of highly-educated workforce is a positive symptom, as the proxy of the increasing number of professional workers and technicians in the investment of employment. Each state has different regeneration policies in overcoming population issues, therefore, thorough planning is required for the productive age population to truly has desired quality and productivity during the occurrence of demographic bonus.

**Keywords**— generation Y, generation Z, productivity.

## INTRODUCTION

The absolutism of changes in the human life perspective is a cycle, and as long as history is constantly illustrated and proved by humans who always experience changes (Bryson, 2002). The dimension of change, therefore, is the undeniable universal law, which not only applied for humans but also for the whole universe and everything within (Putra & Suyatno, 2015).

These changes occur throughout generations, or commonly called as “regeneration”, like a wave with gentleness confronting the changing times and is a transition event of human civilization. The regeneration process or the formation of the new generation that will show how the future generation of a community and how the future burden of life is lied on the shoulders of the current generation. The formation process of a new generation will give birth to an ideal generation, i.e., a new generation that matches the dreams or wills of their era (Suryapratama, 2015; and Apriansyah, 2017).

Civilization has diverse meanings. In the relation with human society, this term is often used to point out a complex community that is characterized by the practice in agriculture, attainments, and settlement. In comparison with other cultures, members of a civilization will be arranged in various complicated

divisions of work in the social hierarchy and structure (Kim, 2001).

The term “civilization” is often used as a broader resemblance of the term “culture”, which popular among academicians. Every human presence can participate in a culture, which can be defined as arts, customs, habits, beliefs, and values, even attitude and behaviour in a tradition as a way of life of a community (Kim, 2001; and Craig et al., 2007).

In the widely-used terminology, civilization is a descriptive term that is relative and complex for agriculture and culture of a city. Civilization can be differentiated from other cultures due to its complexity in social organizations and diverse economic activities and culture. Therefore, culture can be defined as a thing that is becoming; while civilization is a thing that has been done (Craig et al., 2007; and Rainer, 2017).

Civilization, if studied from the symptoms of demographic transition, indicating population composition that is close to perfect, which can be shown by the shifting of population structure from high rates of fertility and mortality to the development pattern of population with low rates of fertility and mortality. This demographic transition is the implication of the changes in attitude, behaviour, way of life of the majority of

Indonesian people, which are more efficient and productive, and the change in the way of life that is getting modern (Caldwell et al., 2006).

In the processes of demographic transition and regeneration of civilization that run concurrently, an issue raises: how to build a generation that has productivity as an adequately high human resources. Demographic bonus should not become contra productive, which means that a higher education produces a higher percentage of unemployed graduates (Suryadi, 2011; and Suryadi et al., 2014). As a result, open unemployment or underemployed rate emerges; and the average productivity of Indonesian workers will be indicated as very low should this rate escalates, which means that the shifting of human civilization structure will occur.

This paper studied about civilization and productivity in the perspective of demographic bonus and the emergence of generations Y and Z. By using qualitative method and descriptive analytics (Neuwman, 1994; Nasution, 2003; and Rahmat, 2012), this paper studied the affairs related to the issues of civilization, productivity, demographic bonus and the emergence of Generations Y and Z in the context of Indonesian nation-state life during the globalization era and the IT development.

## **RESULT AND DISCUSSION**

### ***Generations and Regenerations in Civilization***

A generation is all people born at roughly the same time. According to Y.R. Munthe (2017), a generation is a group of people that are based on the year of birth, which also grouped based on historical and sociological experience encountered collectively (Munthe, 2017). If being applied in familial relationship, generation can be defined as a group of descendants. The term "generation" can be used as a measure unit of time related to the past or future times. Generations can also be defined as factions, namely people characterized by specific natures or circumstances (Howe & Nadler, 2012). Population regeneration and development are inseparable with natures and characteristics of the population of a nation along with their conditions. Population issues that encompass number, composition, distribution, change, growth, and characters of population are directly correlated with the considerations of development, either regarding concept, purpose or strategy of the development of a nation. An ideal development is the development that must be addressed wisely, carefully, with the concept of sustainable development, adjusted with conditions and characters of the nation itself (Secretary of State of RI,

2005). Each state has different regeneration policies in handling population issues and in conducting regeneration. A regeneration is a transfer of opportunity to grow (Howe & Nadler, 2012; and Fakhryrozi, 2014). This growth is a crucial part of the learning process. "Old" people must be responsible with their maturity and move towards broader services. While "new" people are given with the opportunity to continue the "struggle". Most people interpret this as a cycle that must be passed, while some interpret it only as it is. It is still difficult to regenerate leadership to young figures because political and democratic situations in Indonesia are not possible to do so. Moreover, until present, the emerging leaders are born by the system that has yet to provide the opportunity for the young (Fakhryrozi, 2014). There are only two options of good national leaders, namely creative young generation or wise old generation; and these two actors can still be able to stimulate the nation's productivity. Regenerating leadership to young generation could happen if the parties involved respond to this matter seriously. Being a leader does not have to be a president or a major or the like of it. By following a youth organization, defending the state, and leading oneself properly are things that can be expected from the current young generation (Kaelan & Zubaidi, 2007; and Faruq, 2012).

Regeneration is a transformational process that must be interpreted further. A successful regeneration can also be assessed from the amount of accomplished organizational goals in which all accomplished results have better indicators than the previous generation. In historical perspectives, civilization events provide a limitation that civilization is the system that supports humans in improving productivity in the cultural sector, in which elements like economic sources, political democracy, tradition, ethics and moral, science and technology, and arts (Suwirta, 2009; and Rainer, 2017). Civilization is defined as the total complexity of the products of the mind of human groups that manage states, race, tribes, or religions, which differentiate them with others. Whether a community is civilized or not is relative and must contain norms. The need for etiquette with civilization refers to communities with social organizations, cultures, and advanced ways of life, which differentiate them with other communities (Craig et al., 2007; and Rainer, 2017). Civilization is a specific and advanced cultural stage, which is characterized by the mastery in science, technology, art, and etc. Communities have different civilizations from one to another. Civilization refers to a comfortable life. Civilization indicators include social organization, highly cultured, and advanced way of life (Craig et al., 2007; Suwirta, 2009; and Rainer, 2017). According to

M.A. Karim (2009), civilization is parts of a culture that already has technological system, building art, fine art, state system, and broad knowledge (Karim, 2009). It is emphasized further that the general definition that being used is that civilization is the part of culture that is aimed to facilitate and put human life in prosperity (cf Craig et al., 2007; Karim, 2009; and Rainer, 2017). In western civilization, civilized humans are those who educated, polite, and cultured. The important characteristic in the definition regarding civilization is culture, such as being lettered. The important factors in the making of culture are religion, language, art, and science (Craig et al., 2007; Suwarta, 2009; and Rainer, 2017). Civilization is the part of subtle, beautiful, advanced, and high culture. Civilization is also defined as a group of a broadest identity of all human cultivation results, that encompass all aspects of human life, including buildings and roads, or non-physical ones, such as identified values, moral order, art, culture, and science and technology, either from the general objective elements, such as language, history, religion, habit, institution, or by subjective self identification (Craig et al., 2007; and Rainer, 2017).

The subjective meaning regarding civilization is the term to describe an advanced culture that is relative and complex for urban agriculture and culture. According to KBBI (Indonesian Great Dictionary), civilization is inner and outer progress (intelligence and culture), or aspects related to politeness, tact, and culture of a nation (Department of Education and Culture of RI, 2001). Samuel P. Huntington (1993), the Professor from Harvard University of United States, as cited by D. Supriadi (2004), proposes what he refers to as “civilization paradigm”, which sees that the future of the world will be filled with the clash of civilizations. After the end of the cold war (1990s), the East-West conflict will be replaced by the clash of civilizations between the Western world with the other worlds, including with the Islamic civilization (Huntington, 1993; and Supriadi, 2004).

Human civilizations will never go backward, by contrast, they will always be dynamic in the development. The dynamics of the direction of civilizations must be bringing inevitable impacts. The development of science is keep happening until present, moving faster, making the current era to be called as “the exponential era” (Hayat, Sutarno & Erwin, 2017; and Ibnoe, 2017). The indicator of scientific revolution in this exponential era is the high number of technologies found by modern scientist, which are very sophisticated in various sectors of people’s life. By contrast, the demography that tends to grow also provides its unique challenge, namely how the demographic growth is

followed by the productivity of human resources (Harmadi, 2017; Hayat, Sutarno & Erwin, 2017; and Ibnoe, 2017).

#### ***Demographic Bonus versus Productivity.***

The phenomenal issues that become the current study, one of which, is demographic bonus. Demographic bonus is a condition where the number of productive population or workforce—15-64 years old—is greater than the non-productive population (under five years old or above 64 years old) (Jati, 2015). In 2020-2030, Indonesia will enter the demographic bonus. During these years, it is estimated that Indonesian productive population will reach 70% (Jati, 2015; and Saichudin, 2015). Demographic bonus provides some benefits caused by the change in population structures, namely the opportunity to provide economic advantages due to the decrease in dependency ratio; and/or decrease in the proportion of young population that can reduce the amount of investment costs for the fulfilment of public service needs (Saichudin, 2015). For this demographic bonus to truly give benefits, preparations are required for the productive-age population to have the desired quality and productivity during the emergence of this demographic bonus, through educational programs and other human development programs (Suryadi et al., 2014). The shifting of the composition of Indonesian population age that only requires about 25-30 years encourages some adjustments on strategic targets, which encompass half of the National Long-Term Development in the period of 2005-2025 (the Ministry of Education and Culture of RI, 2012). Aside from the phenomenon of demographic bonus, the future population growth pattern of Indonesia is estimated to be totally different with the growth pattern that has been occurring in the past ten years. The more perfect the health service, and the decrease in mortality and birth rates, a demographic transition will occur (Caldwell et al., 2006; and UNDP, 2014).

This demographic transition symptom indicates a more perfect population composition, which can be indicated by the shifting of population structure from high fertility and mortality rates to the population development pattern that has low fertility and mortality rates. Starting from this kind of population growth pattern, the age composition of Indonesian population in the beginning of the 21st century starts to shift from the domination of old and adult population age. The population structure will change, from the pyramid shape (domination of young age) to the stupa shape (domination of adult age). The change of this structure indicates that the population composition of Indonesia in 2020 forward will start to shift from the domination of young population to the

productive age of adult population (Caldwell et al., 2006).

The Minister of Manpower of the Republic of Indonesia, M. Hanif Dhakiri, on May 22nd 2017, proposed that in relation to demographic bonus, besides improving the quantity of employment, the biggest homework for the government now is improving the quality of work. The quality of work in the context of human resources is productivity.

The mission of the national education development is directed towards the embodiment of dynamic balance between the effort to strengthen identity and national character or inward looking, through improvements of quality, productivity, and competitiveness of the nation globally or outward looking (Kadir, 2016). The government will gain the easiness in managing and building technical sectors when their supports are expert and professional in their fields. National education meritocracy will get manifested if the stakeholders are assigned based on the expertise factor or by professional appointment; and not based on political appointment, for those who are entrusted as the holders and implementers of quality national education policies (Brown, 2004). In various workshops, the issue of human resources development acquires a lot of concerns and studies. The improvement of human resources is basically the process of improving human quality and transforming humans into productive workforce; while the desired quality of human resources is the capability to implement national development in innovative, creative, and productive manners, with high work spirit and discipline (Simanjuntak, 1994). The problem in Indonesia is that the current national education has yet to produce educated humans who functioned as the driving force for the national development (Hasibuan, 1989; and Suryadi et al., 2014). Besides, the recent national education still face structural obstacles in fulfilling people's need for quality education. The main issue of education is how the cohesiveness between information technology, education, and quality can become three aspects of strategic policy in improving competitiveness (Drost, 2005; Alifuddin, 2012; and Suryadi et al., 2014). This condition is reflected in the Human Development Index that has ranked Indonesia in 108th place in 2014, increased by 16 points from the 124th place in 2012, or returning to the original rank that has been achieved in 2005 (UNDP, 2014). The increase in HDI in 2014 was more due to the improvements and even distributions of people's purchasing power index in the last 8 years. In the last progress of Indonesian HDI, Y. Fauzi (2017) reveals that United Nations Development Programme (UNDP) in its report

regarding 2016 Human Development Report recorded that Indonesian HDI in 2015 was ranked 113th, decreased from the 110th place in 2014 (Fauzi, 2017). UNDP also recorded that Indonesian HDI in 2015 was amounted to 0.689 and ranked 113th of 188 countries globally. This HDI increased by 30.5% in the past 25 years. However, at the same time, UNDP sees some gap indicators that contradict the increase of this HDI (in Fauzi, 2017).

Basically, productivity is the mental attitude which always views that today's quality of life must be better than yesterday, and today is done for the better tomorrow (Siagian, 2009; and Hoesin, 2015). According to J. Riyanto (1986), technically, productivity is a comparison between achieved results or output and all required resources or input. Productivity contains a meaning of the comparison of achieved results with the role of workforce per unit of time (Riyanto, 1986). Productivity can be considered as a comprehensive measure regarding the way to fulfil the following criteria: first, purpose: to the extent of which productivity can be achieved; second, efficiency; how effective the used resources, namely by doing things right; third, effectiveness; what has been achieved compared with what may be achieved by doing the right things; and fourth, comparative: how productivity performance is recorded from time to time (Siagian, 2009; Muamman, 2013; and Hoesin, 2015).

Productivity is the mental attitude that constantly attempts to conduct quality improvement of life continuously through improvements in efficiency, effectiveness, and quality (Siagian, 2009). Efficiency is a measure of the level of input usage saving rate in a production process of goods and services. Effectiveness is a measure of target achievement rate of a production process of goods and services, either in the context of quantity or quality (Hoesin, 2015). Productivity, therefore, is a crucial matter, because productivity has a massive role in determining the success of a business. Therefore, productivity must become an inseparable part in formulating business strategies, which encompasses production, marketing, finance, and other sectors (Siagian, 2009; and Hoesin, 2015).

The issue is the role of human resources management from generation to generation in facing various challenges, considering different behaviours of each generation. If being related to the challenges in the next three years, many changes will occur in Indonesia in 2020. According to a survey in the United States of America conducted towards 770 individuals of Generation Z, around 20% of workers from Generation Z will enter the new employment world (Firman, 2016).

In the context of Indonesian education, productivity parameters are measured through output and impact of a level of educational institution. Vocational education is the form of job-preparation education that is aimed to produce productive economy actors, including creative workers or productive entrepreneurs (Department of National Education of RI, 2005). Meanwhile, according to P. Foster (1965), the success of job-preparation education is not measured from the perspective of education providers or supply perspective, such as national exams or graduation certificates, even the untested competence certificates; but measured from the perspective of graduate users or demand perspective, such as work satisfaction, productivity level, career improvement, employment absorption, or graduate income (Foster, 1965).

### ***The Perspective of the Emergence of Generations Y and Z***

The emergence of smartphones or gadgets, and the rapid growth of Information Technology have brought massive changes for the daily life of many people (Green, 2001). Whether we realize it or not, this condition affects one's behaviour. If we observe the difference in the generation who are technology literate, the average age is 20-30 years, and those who are new to technology aged above 40 years.

The naming of the existing and previous generations was beginning from the birth of generation theory that occurred in United States. The creators of this theory drew a conclusion in the form of classifying generations. The classification of these generations is basically based on the year of birth (Sanburn, 2017). D. Tascott (2008), in his book *Grown Up Digital*, divides population demography into these following groups: (1) Pre Baby Boom, born in 1945 and before; (2) The Baby Boom, born between 1946-1964; (3) The Baby Bust, born between 1965-1976, named as Generation X; (4) The Echo of the Baby Boom, born between 1977-1997, named as Generation Y; (5) Net Generation, born between 1998 to 2009, named as Generation Z; and (5) Generation Alpha, born in 2010, named as Generation A (Tascott, 2008). Generation Y is known as the Millennial Generation, born between 1977-1998. In 2008, Generation Y aged between 21 to 29 years. They have interacted with technology since they were born. This generation uses many instant communication technologies, such as email, SMS (Short Message Service), instant messaging, and other social media, such as Facebook and Twitter. Aside from that, this generation also loves online games. This Generation Y is characterized as confident, optimistic, expressive,

free, and love challenges (Oktavianus, 2017). Bambang Suryadi (2015) describes this generation as follows:

Open to new things and always want to be different from others. They truly use their creativity to create something new. This generation favours a relaxing work atmosphere and capable of doing things simultaneously (multi-tasking). They care about styles and quickly adapt to technology. Unfortunately, this generation can get bored easily and their loyalty at work is lacking (Suryadi, 2015).

Generation Y has greater self-regard and narcissism (thinking highly of themselves) than the previous generations. This condition surely affects their big expectations at workplace (related to rewards and work conditions). In this context, D. Bursch (2014) mentions that Generation Y is identified as the most diverse generation in terms of attitude, behaviour, and culture; the Generation Y will also add more diversity at workplace (Bursch, 2014).

Generation Y grows when the world is always connected for 24 hours and seven days, therefore, Generation Y considers information as an easy thing and quickly obtained. This condition influences the way they seek information, solve problems, build relationships with others, and communicate. Generation Y tends to switch jobs if they feel that their expectation towards the job is unfulfilled. This issue is influenced by their high self-regard and narcissism (Bursch, 2014; and Merari & Suyasa, 2016).

Meanwhile, Generation Z (generally abbreviated as Gen Z) is also popular as iGeneration or Homeland Generation as the generation that comes after the Millennial Generation or Generation Y. According to D. Tascott (2008), Generation Z is the cohort born from 1998 to 2009 (Tascott, 2008). The first Generation Z in Indonesia is the generation that born in 1995, at the time the internet has come to Indonesia. This Generation Z has grown up, seeking and having jobs, watching the transition of new order regime (1966-1998) to the reformation regime (1998-present), and having the skills to affect sectors in the daily life, such as economic, political, social, religious, and other sectors (Tascott, 2008; and Tirto, 2017).

Generation Z is generally described as more comfortable in following the development of technology. This is because they have been using technology since they were born. This generation has utilized technology for distant communication. Moreover, this technology is enriched by the availability of giant information database spread across in the online world (Tascott,

2008; Kusuma, 2016; and Tirto, 2017). Similar to the previous generation, i.e., Generation Y, smartphones also become one of the primary things for the Generation Z; and the difference is on their use in the daily life. As the generation born in the digital era, internet access has become the need for Generation Z. If the first Generation Z is those who were born in 1995, then the oldest people of this generation must be in the age of 22 years old in 2017. They have reached adulthood and employed (Suryadi, 2015; Kusuma, 2016; Oktavianus, 2017).

The issue is the role of HR (Human Resources) management from generation to generation in facing various challenges, considering the different behaviours of each generation. If being related to the challenges in the next five years, many changes will occur in 2020. According to a survey in the United States of America conducted towards 770 individuals of Generation Z, around 20% of the workforce of the Generation Z will enter the new employment world (Firman, 2016; and Kusuma, 2016).

The phenomenon of the emergence of Generations Y and Z causes a consequence of how the productivity of these generations can be improved. As an initial step, we must know precisely the characteristics of generations Y and Z. Generations born in the adjacent years will face community situation, technological exposure, and similar culture, therefore, they have distinct behaviours that do not have by the previous or future generations. The different characters among generations might potentially become a synergy or instead cause conflicts (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017). If such conditions occur, how to optimize the contribution of generations Y and Z for the progress of Indonesian civilization?

Generations Y and Z have different characteristics because these generations born in different times (Tirto, 2017). A generation illustrates conditions or situations where every individual has experienced life, can reflect who we are, and how we see the world from our own perspective. Each generation also has beliefs, values, cultures, perspectives, hobbies, things they dislike, proficiencies/skills towards life, and different jobs. These differences that cause positive impacts if they can be managed properly, and on the contrary might cause problems that will affect the decrease in performance of employees due to the non-establishment of cooperation among generations (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017).

Generation Y is individuals born between 1980-2000 (Taspocott, 2008; and Meier, Austin & Crocker, 2010).

This generation born in the development era of information technology, therefore, they have different characteristics than the previous generation. For instance, Generation Y pays more attention to the aspect of work-life-balance compared to the Generation X (Taspocott, 2008; Meier, Austin & Crocker, 2010; and Tirto, 2017).

The presence of Generation Y in Indonesia has actually been known, even has been used by marketers as a potential market segment, both in information technology and financial or banking industries (Rugimbana, 2007; and Budiman, 2008). This generation is used as a potential market due to the unique characteristics owned by this generation, namely purchasing power (Cui et al., 2003; and Walburg & Pokrywczynski, 2001); economic of size or the number of generations within a community, both in developing and developed countries (Marthin & Bush, 2000; Cheng, 2001; Greene, 2003; and Braunstein & Zhang, 2005); and the possibility to be loyal and lifetime customers (Walburg & Pokrywczynski, 2001; and Braunstein & Zhang, 2005).

The contrasting thing that occurs in the field of HR is when the existence of Generation Y as a workforce, especially in the banking industry of Indonesia, has yet to receive a special attention. In this context, V.S. Anantatmula & B. Shrivastav (2012) suggest the importance of looking at the current issue from the generation gap that occurs due to the lack of understanding over the existence of a new generation (Anantatmula & Shrivastav, 2012). The impact, directly, affects the contribution of generations in the work environment, so a strategy is needed that is in accordance with the behaviour, values, and work ethic of Generation Y (cf Lindquist, 2008; Anantatmula & Shrivastav, 2012; Zopiatis, Kapardis & Varnavas, 2012; and Luscombe, Lewis & Biggs, 2013).

The characteristics of Generation Y are (1) their communication patterns are very open compared to the previous generations; (2) fanatic users of social media and their lives are highly influenced by the development of technology; and (3) their political and economic views are more open, therefore, they seem to be more reactive towards environmental changes that happen around them, and looked more concerned towards wealth (Taspocott, 2008; Suryadi, 2015; and Oktavianus, 2017).

The characteristics of Generation Y in each stage of their life are also very different. During the childhood, Generation Y is greatly depending on group cooperation. When they start to become adults,

Generation Y will turn into more passionate individuals if working in groups, especially during the time of crisis. During the middle age, Generation Y will get more energetic, dare to take decisions, and most of them are capable of becoming strong leaders. When they are old, Generation Y will become a group of parents who can provide contributions and critics towards the community (Taspocott, 2008; Suryadi, 2015; and Oktavianus, 2017).

Generation Z, or so called iGeneration, Net Generation or Internet Generation, is born between 1995-2010. This Generation Z born during the rapid growth of Information Technology. During the Generation Z era, the use computers, internet, and smartphones was booming. Therefore, it is not surprising that the Generation Z is so familiar with the utilization of digital technologies and social media. J. Rothman (2014) predicts that in 2020, the Generation Z will flood the job market, and it is analogized that Gen Z will flood the job market like a “tsunami” (Rothman, 2014).

Generation Z is open-minded, and spontaneous in revealing what they feel and think. They are the most connected, educated, and advanced generation. This Generation Z has similarities with the Generation Y, however, they can applicate all activities at one time. For instance, playing with twitter app on phone, browsing with PC (Processor Computer), and listening to music with headset. Whatever they do is mostly related to the virtual world. Since the childhood, Generation Z has known technologies and familiar with sophisticated gadgets that indirectly affect their personality (Firman, 2016; and Kusuma, 2016).

The uniqueness of this Generation Z may become a stumbling block if it is not being attached to the local wisdom of Indonesia. In addition, the childhood of Generation Z is totally different with their predecessors. They are more exposed to technology-based games than traditional games that are more about the element of collectiveness (Firman, 2016; and Kusuma, 2016).

Every generation has its own characteristics and problems, so does the Generation Z. H. Wibawanto (2016) explains that the characteristics of Generation Z are proficient in using technological devices; happy to socialize with various circles, especially through the use of social media; expressive and tend to be tolerant with cultural differences, and very concerned about the environment; swiftly move from one thought/job to another thought/job (Wibawanto, 2016). In relation to technological devices, Generation Z tends to use these a lot. They spend 7.5 hours daily in using digital devices; 22% of them login into social media accounts more than 10 times a day; 75% of them have their own phones

which 25% are used for social media; while 54% for texting and 24% for instant messaging (Kusuma, 2016; and Surahman, 2016).

More specifically, Generation Z has the following characteristics: first, proficient in technology. This generation is the “digital generation” that masters information technology and various computer applications. This generation can also access various information they require easily and swiftly, either for educational or daily life purpose. Second, from the social aspect, this generation is very intense in communicating and interacting with all circles, especially with peers through various networking sites, such as Facebook, Twitter, or through SMS (Short Message Service). Through these various media, they can express what they feel and think spontaneously. This generation also tends to be tolerant with cultural differences and very concerned about the environment. Third, the multitasking generation, as the generation that can do various activities at the same time, they can read, speak, watch, or listen to music at the same time. They want everything done and run swiftly. They do not want things to be long-winded and convoluted. Fourth, this generation tends to have less verbal communications, egocentric and individualist, tend to expect instant results, all instant and all cheap, impatient and do not appreciate the process (cf Firman, 2016; Kusuma, 2016; Surahman, 2016; and Wibawanto, 2016).

Conclusively, it can be understood that the Generation Z is the generation born in the era of information technology. Therefore, the mindset of this generation is technological and positivistic mindset. Therefore, it is easier for them to believe a reality with objective, empirical, and rational measures (Firman, 2016; Kusuma, 2016; Surahman, 2016; and Wibawanto, 2016).

The existence of smartphones/gadgets does not necessarily make them—Generations Y and Z—to be completely similar in shopping. Generations Y and Z completely utilize the existence of smartphones/gadgets to get goods or services they desire. Despite searching through smartphones/gadgets in finding goods and products, the Generation X that is below these two generations still conducts the transaction offline or straight to the merchant or store (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017). In other words, their search through smartphones/gadgets are merely to get information. If being compared, Generations Y and Z have their respective differences. Generation Z does not care about brands, quality is what important. While Generation Y puts brands above everything as long they are affordable. Unlike the

Generation Z that expects more than what they wear (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017).

Both generations Y and Z have their positive and negative natures. By understanding their differences, it is expected that educators or leaders of companies/institutions can understand individuals from these two generations according to their specific characters. For companies/institutions, Generations Y and Z expect honest leaders. Social network can be used by leaders of companies/institutions for various daily activities with their employees. Companies/institutions should in the most possible way create a superior work culture (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017).

Uniquely, each generation has a pattern of personality and behaviour. The difference of birth time is highly influential towards one's lifestyle and mindset, which is called as the cohort effect. In literal meaning, cohort means group. The cohort effect is caused by the difference of birth times or generation periods (Santrock, 2002). Some tips to optimize the productivity of Generations Y and Z are (1) creating a work atmosphere with continuous improvement, namely giving the opportunity for those who express their ideas and creativities, because they need a work environment that gives the freedom for self-expression but also challenging; (2) redefining various policies on recruitment and admission of new employees; (3) giving trainings about the management style of Generations Y and Z to the leaders/supervisors; (4) strengthening group works because Generations Y and Z are used to work in groups, trained them to do dialogue, to debate, test their logic, and be proficient in presentation by applying various multimedia, thus, this situation is expected to give rise to new innovations; (5) preparing a time for feedback and discussions; (6) intensive coaching; and (7) committing more open communication (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017).

Generations Y and Z are generations born amidst the transition of the rapid growth of technology. It is estimated in 2020 that Generations Y and Z will dominate the workforce structure by 45%, which will increase to 75% in 2030 (Suryadi, 2015; Firman, 2016; Kusuma, 2016; and Oktavianus, 2017).

Studies towards Generations Y and Z are the way to understand across generations. According to Y.R. Munthe (2017), this effort must be done to prevent intergenerational barriers, such as incoherent efforts and work targets; losing the opportunity in the context of

sales and service; disrupted communication that gets worse; resistance emerges in the form of the rejection towards changes; disrupted cooperation; decreased team involvement; conflicts emerge; inefficient work; even sabotages (Munthe, 2017).

Generally, Generations Y and Z have a lot of similarities. They are the generations that have less capability to fight and survive compared to the previous generations. Both generations (Y and Z) born in an era that is full of convenience, therefore, their ability to survive is different with the past generations. The other downside of these two generations is they take everything for granted, making them often delay their work. In addition, they get bored easily and lacking the appreciation towards the process. However, these two generations do not always have a negative image. There are many positive natures that can be optimized at work. Generations Y and Z are fast learners. They are also multi-tasking, making them capable of finishing work quickly (Suryadi, 2015; Firman, 2016; Kusuma, 2016; Munthe, 2017; and Oktavianus, 2017).

By studying the characteristics of these two generations (Y and Z), the superiorities and downsides they have, they still need to adjust themselves with the employment world. This needs to be done to prepare them in facing the transition, because soon enough, these two generations will fill the positions in crucial and strategic companies/institutions in Indonesia.

#### ***Adopting the Rapid Development of IT (Information Technology) Wisely***

The shifting of civilization is inevitable and universal. On the other side, the demographic transitions in the recent ten years will enter the stage of demographic bonus. The demographic bonus that is dominated by the productive age will be a disaster if it is not being managed wisely (Jati, 2015).

This demographic bonus becomes the homework for the government and related ministries, considering the population structure that is highly beneficial for the development purpose. The number of productive age populations is massive while the proportion of young age is getting smaller and the proportion of elderly is still small (Jati, 2015; and Saichudin, 2015).

The phenomenon that is not less important is the naming of Generation Z. In the last decade, Generation Z has continuously been studied, either from its political, economic, or life style preferences (Firman, 2016; Kusuma, 2016; Surahman, 2016; Wibawanto, 2016; and Oktavianus, 2017). This is because there has not been



any generation in human civilizations that born familiar with technology like the Generation Z.

The characteristics of Generation Z become the current reference for the Government and business actors. If Generation Z is those who born in 1995, it means that they have entered adulthood, have voted in elections, searching or having jobs, and other things that might affect the economy, politic, and social life in Indonesia, even globally (Firman, 2016; Kusuma, 2016; Surahman, 2016; Wibawanto, 2016; and Oktavianus, 2017).

The spreading of technology-based businesses, called as startups, can be made as the standard that the current world is entering the fourth industrial revolution. Various life sectors have begun to be ruled by software and technology, from sectors related to the primary life and expanded to tertiary needs. In the early 2000s, hand-phone is considered as one's tertiary need. Now, however, hand-phone or what is more popular as smartphone has become the primary need of the global population.

Software will replace traditional industries in the scope of next five to ten years. In this practically short time, we must be swift in adapting to the growth of technology to be able of surviving and competing. In the future, traditional industries will experience a lot of turmoil, they have to adapt with the increasingly sophisticated technology. In the future, developed industries in the future will be industries that do not consume a lot of capitals and resources. They will keep growing by relying on technological sophistication and software (Ningtyas, 2017).

Transportation and accommodation sectors are the life sectors that can be put as examples. We know that Uber is just a software. They do not own their own fleet. However, Uber now has become the biggest taxi company in the world. Similar to those that become the hospitality companies in the world despite not having any properties. These massive companies are merely relying on software and technology that are always improving every day (Ningtyas, 2017).

In 2018, the first autonomous car was launched for public. In the next two years, around 2020s, automotive mobile industries will start to shift. In future years, we might no longer need personal vehicles. We only have to call for a car to pick and bring us to our destination (Ningtyas, 2017).

In the past, human intelligence can be beaten by only a set of computer. Although we know that in the beginning, computer was also programmed by humans.

But, imagine this, if there is a genius who only works with theories without implementing and utilizing them for the sake of the world, this person will sink along with the era that keeps leaving us behind. This condition will be totally different if the genius meets with other geniuses and together create a sophisticated technology that can be implemented in the social life. These technologies will eventually can be utilized and studied by others and will get some developments and models that are adjusted to human needs at a specific time and place (Hariono, 2010).

Most of our lives have been ruled by technology. 2017 became the gate years of the exponential era. The millennial generation that will mostly develop and utilize technology in their lives. In addition, in the future, the life of millennial generation will be truly integrated with robots and computer (Azizah & Mardiani, 2016). Therefore, entering this exponential era, we must accelerate ourselves faster and higher, at least to be able to adapt. Acting wisely in using technology is the key (Azizah & Mardiani, 2016; and Ningtyas, 2017).

The turmoil in the world will tend to increase during the exponential era. This condition is the result of the era of exponential speed where humans are demanded for their imminence, in real time. According to M.E. Ibnoe (2017), the mindset of exponential speed is indicated by these following things, fast response, to avoid being hampered; real time, i.e., immediately processed as soon as it is received; follow-up, i.e., immediately responded, not being delayed; finding ways, not cul-de-sac; studying or identifying information and truths, not receiving without examining; parallel solution, not serial; support of information technology, not manuals; 24/7 or 24 hours per day and 7 days per week, not eight to five; connected, not isolated (Ibnoe, 2017).

Private things might be accessible by others, even very likely to be made as criminal objects in the virtual world. The risk of criminality will enter a higher level since technology is advanced. Therefore, preparedness, knowledge, and wisdom become a necessity for each individual in facing attacks from various sectors in this exponential era (Ibnoe, 2017; and Ningtyas, 2017). The world stability is also depending on how fast we accelerate and how wise we deal with things to happen.

## **CONCLUSION**

In the perspective of civilization history, regeneration and productivity is closely correlated with the emergence of a civilization that will surf the dynamics of humans and natural environment, which generate and accentuate motivation and awareness; a will of humans

to always improve the quality of life and better livelihoods in all sectors.

Based on the study above, it must be considered that the regeneration of human civilizations is faced on the rapid development of Science and Technology, globalization, and demographic bonus. Demographic bonus is a condition where the number of productive population or adult workforce (age 15-64 years) is greater than the non-productive population (under 5 years and above 64 years).

Generations Y and Z are the regeneration of civilizations who both have the opportunity to face the challenges of the times, where every civilization faces uncertainty in dealing with the future. Generation Z is the most influential, unique and diverse generation of the generations that have ever existed. Generation Z is known as a versatile character, more individual, more global, more open-minded, quicker to enter the workforce, more entrepreneurial, and certainly more technology-friendly.

Generations Y and Z need to optimize their productivity in order to contribute to the development of the nation and state in the global era. The percentage of the highly-educated workforce is a positive symptom, as a proxy of the increasing number of professionals and technicians in the investment of employment.

Based on the conclusions above, recommendations related to the correlation between civilization and productivity can be proposed as follows. (1) a system is required that can adopt and wisely interpret contemporary values amidst the rapidly-growing development of Science-Tech and IT (Information Technology); (2) each state has different regeneration policies in handling people and in conducting regenerations, therefore, a thorough planning is needed for people in productive age to truly have the desired work quality and productivity during the occurrence of demographic bonus; and (3) a strategic and wise anticipation is required in facing the demographic bonus, namely how this moment can make the millennial generation to have maximum work quality and productivity, especially in welcoming the Golden Indonesian in 2045.

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