





Gema Wiralodra

Publication details, including instructions for authors and subscription information:
<https://gemawiralodra.unwir.ac.id>

	Gema WIRALODRA
	Editor-in-Chief: Yudhi Mahmud
	 Publisher: Universitas Wiralodra

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To cite this article:

Purwoko, S. (2023). Involvement of the millennial generation in boosting the digital economy in the era of society 5.0: literature study. *Gema Wiralodra*, 14(2), 716-723.

To link to this article:

<https://gemawiralodra.unwir.ac.id/index.php/gemawiralodra/issue/view/22>

Published by:

Universitas Wiralodra

Jln. Ir. H. Juanda Km 3 Indramayu, West Java, Indonesia

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Abstract

The purpose of this research is to find out how the involvement or role of the millennial generation is in boosting the digital economy in the era of society 5.0. This research method uses a literature review study by searching for articles using search engines such as EBSCO, ScienceDirect, and Proquest. Articles were searched using "Millennials, the digital economy and the era of society 5.0. The criteria for the articles used were those published in 2012-2022. Based on the articles collected, it was found that every year, Indonesia's digital economy is increasing. The sector that plays the most role is e-commerce, with a value of USD 59 billion in 2022. This is in line with Indonesia's increasing number of internet users, numbering 210.03 million, and most users are millennials, which involves assisting the government in encouraging economic growth through entrepreneurial activities. However, in the process, the millennial generation still faces various challenges. Various parties, especially the government, are needed to assist and provide facilities to the millennial generation to develop themselves into more significant business actors.

Keywords: Millennial Generation, Technology, Digital Economy, Society 5.0

1. Introduction

Covid-19 pandemic, aside from causing many worrying things, there are also many lessons that we can take advantage of. One of them is the increasing digital economy in Indonesia. Indonesia's digital economy is currently at the highest peak in ASEAN, with a value of US\$70 billion, or controlling 40% of ASEAN's digital economy share. This value is estimated to proliferate to reach US\$146 billion in 2025. One of the newcomer sectors that has appeared to fill Indonesia's digital economy landscape is the edutech sector, which currently has active users with significant growth reaching 200% in 2020 (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022).

The process of developing the digital economy is still facing many challenges. For this reason, the millennial generation's involvement is needed to boost and grow the digital economy. Edwin, Assistant Deputy for Digital Economy, says Indonesia needs 9 million digital talents for the next 15 years. The World Economic Forum predicts that in the next four years, 75 million jobs will change due to technological developments. Jobs were replaced due to the many shifts from conventional/manual power to fully automatic. This will bring up types of work that integrate human, machine, and algorithm skills (Adha et al., 2020).

Based on BPS data in 2020, of the 270.2 million Indonesian population, 163 million people are in the age range of 15-64 years. Where internet penetration is at 71%, and the use of social media is 59% (<https://www.ekon.go.id/publikasi/detail/3154/participation-generation-milenial-dalam-era-digital-to-respond-future-economic-challenges>). This figure indicates that more than half of Indonesia's population is of productive age, most of whom are millennials. Millennials are born in the early 2000s (Sundari, 2019).

Indonesia must prepare digital talent in line with challenges and technological developments. Currently, our digital talent readiness ranking is 45th. This figure is far behind Singapore, ranked first, and Malaysia, ranked 18th (Based on the results of a report issued by the International Institute for Management Development (IIMD) World Competitiveness Center in the year 2020). The millennial generation has been buzzing a lot in recent years, especially on social media. This generation is very close to the digital world because they make digital their personal space in accessing, obtaining, and sharing all forms of information they

find on the internet. Whatever they encounter while surfing is immediately used as a source of information to be shared with the public, often known as the era of Society 5.0 (Sari, 2019).

Society 5.0 can be interpreted as a technology-based concept of a human-centered society. The rapid development of technology, including human roles, is replaced by intelligent robots. ((<https://radarsolo.jawapos.com/dinding/28/10/2020/peluang-tantangan-Generasi-milenial-dalam-menghadapi-era-society-5-0/>). In today's society, the quality of resources Daya, especially the millennial generation, is very influential in economic development and overcoming the imbalances that often occur. The digital economy refers to the economy in the era of society 5.0, so more people think of doing business through internet-based markets. Many generations of millennials enjoy the Internet market (Serang et al., 2021).

Millennials who are good at taking advantage of opportunities, are creative, have extensive knowledge of technology, have forward-looking thinking, and have integrity in the business they are engaged in will be able to produce quality and highly competitive products. The existence of the creative industry will become an arena for the millennial generation in the era of Society 5.0 to express themselves based on technology, especially in environments left behind due to economic inequality (Suwiryawati et al., 2022).

Creative, innovative, and productive young generations can open a business (entrepreneurship) in the era of Society 5.0, which can also assist the government in reducing the unemployment rate in the productive workforce. More and more millennial generations are taking steps to become entrepreneurs, which will also impact the national economy (Kartika, 2022). To carry this out, there will be many challenges and competition, both challenges from within the country and abroad. For this reason, the millennial generation must be well prepared to make a maximum contribution, especially to the development of the digital economy in Indonesia.

In general, this research activity aims to provide an overview of the millennial generation's role in improving the digital economy in the 5.0 era. The hope is that this research can help provide ideas for the involvement of the millennial generation and can be used as material for consideration in compiling appropriate programs to improve the quality of the millennial generation as digital talents in the economy.

2. Method

The research method used in this research is descriptive qualitative with secondary data sources from literature review (literature review). The literature review research method which provides output to existing data, as well as an elaboration of a finding so that it can be used as an example for research studies in compiling or making a clear discussion of the contents of the problem to be studied. Research data was taken from various sources ranging from journals, articles, national seminar proceedings, books, both in digital and printed forms that are relevant to the research topic. In this study, the articles reviewed were also obtained from search engines such as EBSCO, Scencedirect, and Proquest. Articles were searched using the keywords "millennial generation, digital economy and society 5.0 era. The criteria for the articles used are those published in 2013-2023. After collecting several journals and drawing several conclusions, they are examined in depth in a detailed way so that there is a final result that is good and in accordance with what is expected. The object of research is the problem that is examined in research. This research takes the object of business activities carried out by millennials located in Indonesia. The subjects in this study are millennials in Indonesia who do business by taking advantage of the 5.0 conditions that have occurred.

3. Research Results and Discussion

Development of Indonesia's Digital Economy

The power of technology, which is proliferating, has now penetrated all aspects, one of which is the digital economy. The digital economy refers to an economy based on digital computing technology. Where more and more people consider doing business through internet-based markets (Sunarta, 2023). The following presents data on Indonesia's digital economy development for 2019-2024.

Table 1

Development of Indonesia's Digital Economy in 2019-2025

No.	Year	Achievements/Predictions	Percentage
1	2019	USD 41 Billion	-
2	2020	USD 44 Billion	7.3 %
3	2021	USD 63 Billion	43 %
4	2022	USD 77 Billion	22 %
5	2025	USD 130 Billion	69 %

Sources: Google, Temasek, and Bain & Company

Based on the data above, it is known that every year, Indonesia's digital economy has increased. The highest increase occurred in 2021, with 43%. Changes influence this in people's economic behavior due to the Covid pandemic. The world's giant company, Google, projects that Indonesia's digital economy potential in 2025 will reach USD 140 billion. This projection can be achieved if Indonesia can utilize digital media and reduce the misuse of information technology. The development of the digital economy is one of the strategies for transforming the Indonesian economy. This is an effort to restore the post-covid-19 economic situation (Kominfo, 2022).

E-Commerce makes the most significant contribution to the digital economy. An estimated value of USD 59 billion comes from the e-commerce sector. The following is a graph of digital economic values by sector in 2022.

Figure 1

Graph of the Digital Economy by Sector for 2022



(Source: katadata.id, 2022)

Last year the online travel sector still led the way. This year it is e-commerce. The increase in e-commerce from 2015 reached 88%; this year, the figure (GMV - Gross Merchandise

Volume) has reached \$ 59 billion. Meanwhile, online travel is at \$3 billion. Online transport/food gets its share of \$8 billion.

This economic growth aligns with the growth of internet users in Indonesia. The following is a presentation of data on the number of internet users in Indonesia from 1998-2022.

Figure 2

Graph of Internet Users in Indonesia 1998-2022



(Source: APJII, 2022)

Based on a survey conducted by the Association of Indonesian Internet Service Providers (APJII), the number of Internet users in Indonesia has increased yearly. There are at least 210.03 million internet users in 2022. This achievement has increased by 6.78% compared to the previous period of 196.7 million people. This also makes the internet penetration rate in Indonesia 77.02%.

Regarding the age sector, the internet penetration rate is highest in the 13-18 year age group, namely 99.16%. The second position is taken by the 19-34 year age group with a penetration rate of 98.64%. Viewed from the level of income, most people with incomes above IDR 5 million to IDR 15 million access the Internet. The penetration rate was recorded at 96.83%. The internet penetration rate in the income group of more than IDR 15 million is 88.53%. Then, the percentage in the group with income of more than IDR 1 million to IDR 5 million is 88.07%. Meanwhile, the group whose income is less than IDR 1 million has the most minor exposure to the Internet. The penetration rate was only 67.46% (data indonesia.id).

Technology and Social Media for Millennials

The development of the use of Internet media or social media platforms as a medium of communication and information is getting faster (Firdhausa & Apriani, 2021). Social media is an online-based communication technology used as a means of communication between humans; social media is a medium of interaction carried out online using the Internet. Social media users can communicate, make friends, send messages, other social media, and send photos (Perdana & Yusuf, 2020).

The millennial generation, which is rich in creative ideas and breakthroughs, is agile and dynamic and is aware of the importance of technology, which is one of the main objects in expanding the digital economy in the world. This is certainly in line with the dynamics of increasingly advanced technological growth in a relatively short transformation era. Experts suggest millennials were born between 1980 and 2000 (Firdhausa & Apriani, 2021). As a result of technological developments and advances in Internet networks, business activities can now capture a broader market. The digital market situation is dominated by the millennial generation, who tend to want to get something quickly and practically by using e-commerce facilities.

At least there are several roles for technology for the millennial generation. as a medium for dissemination and obtaining information, as a medium for long-distance social interaction, as a tool for expanding market segmentation, an arena for promoting its business products so that a wider audience can recognize it, and as an arena for improving limited human capabilities.

However, apart from this positive side, technology, and social media also hurt the millennial generation if not adequately controlled. Social media can cause stress. This statement is supported by research conducted by the Pew Research Center (2015) in Washington involving 1,800 respondents. This research shows that most women experience high-stress levels compared to men when using social media (Ahmad & Nurhidaya, 2020). Social media can also cause addiction and sleep disturbances. Kuss & Griffiths (2012) from the University Nottingham, England, 2011 researched 43 case studies; the results stated that excessive use of social media could cause mental disorders that require assistance from professional psychologists. Apart from that, the negative impact that is very troubling for the knowledge of the millennial generation is the spread of hoaxes. Hoax writing with various designs has succeeded in adding to the murky problems in society and has influenced the development of public opinion in no small way. The Ministry of Communication and Informatics stated that 800,000 sites in Indonesia indicated spreading fake news (Nugraha, 2018).

The spread of hoaxes occurs due to a need for more understanding of the community's digital literacy. Besides, online media present much instant news, making it easy for people to be instigated by the news. The characteristics of millennial generation are very "thirsty" for digital information, which has also led to the growth of the use of information through social media. This needs to be a concern when hoax information that spreads disrupts national stability and the pillars of national resilience.

Millennial Generation Engagement in the Digital Economy Sector

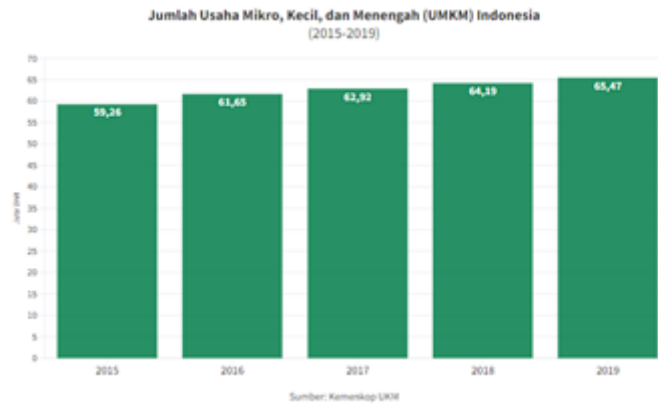
Indonesia is now standing in a century where knowledge, information systems, technology, life behavior, and world developments are progressing so fast, going hand in hand with a shift in the center of influence of world civilization, which gave birth to a trend, namely the era of the industrial revolution 4.0 and the era of society 5.0. The two concepts are similar. The industrial revolution 4.0 emphasizes artificial intelligence, while the era of Society 5.0 emphasizes humans as its components (<https://stakpnsentani.ac.id/2021/06/01/menapaki-era-super-smart-society/>).

As mentioned, the Society 5.0 era focuses on humans as the leading resource. Society 5.0 integrates digital concepts with human resources to balance achieving technological progress and improving the quality of qualified human resources (Nusantara, 2019). As the main component of the digital economy booster, the millennial generation assists the government in increasing Indonesia's economic value. One way that can be taken is to become a digital-based business actor. Entrepreneurship has been proven capable of being a driver of economic growth, especially in terms of creating jobs and its role in developing innovation. The ability to innovate is essential for business people (Wasiah et al., 2021).

The existence of the millennial generation or commonly also called Generation Y is excellent potential for Indonesia's economic development. The Minister of Communication and Informatics Rudiantara assessed that the millennial generation can provide hope for the development of the digital economy. Every year, at least 9 million people of working age enter the labor market, so the need for new jobs is very urgent. Therefore, we need more young entrepreneurs who will create new jobs.

Based on the SMERU survey in 2020, it also indicated the high interest of Indonesia's young generation to become entrepreneurs. It is noted that around 73 percent of the younger generation are interested in becoming entrepreneurs. The data on the number of MSMEs in Indonesia are as follows.

Figure 3
Graph of the Number of MSMEs in Indonesia (2015-2019)



(Source: dataindonesia.id, 2022)

Based on the report from the Ministry of Cooperatives and SMEs, the number of micro, small and medium enterprises (MSMEs) reached 65.47 million units in 2019. This number increased by 1.98% compared to the previous year, which amounted to 64.19 million units. This amount reaches 99.99% of the total businesses in Indonesia. The details of the MSME portion in Indonesia are for large-scale businesses, as many as 5,637 units or the equivalent of 0.01%. A total of 64.6 million units are micro-businesses, or equivalent to 98.67%. A total of 798,679 units were small businesses and provided a proportion of 1.22%; meanwhile, only 65,465 were medium businesses. This number contributes 0.1% of the total MSMEs in Indonesia.

The Indonesian government views MSMEs (Small, Micro, and Medium Enterprises) and Creative Enterprises (businesses that utilize creativity) as channels for inclusive economic growth. Economic growth must be felt by all levels of society in Indonesia, and this can be realized with equal access and business opportunities for all levels of society. Various policy steps and government programs encourage the development of MSMEs and Creative Enterprises in Indonesia (Sundari, 2019). Regarding the digital economy, the government encourages young people to start startups through various programs such as the Beta School, 1,000 Startup Movement, Startup Studio, and HUB.ID and IGDX. These various programs are provided to all Indonesian people free of charge to support the digital ecosystem.

The Ministry of Communication and Informatics encourages people to equip themselves with various skill sets that are increasingly needed in the digital transformation era. The results of a LinkedIn study in 2020 stated that the need for digital skills in the future would focus on four things known as the ABCD, namely Artificial Intelligence, Bitcoin, Cloud Computing, and Data Analytics (<https://aptika.kominfo.go.id/2022/11/accelerate-digital-transformation-paced-growth-digital-economy/>). The birth of these new businesses will become a source of new economic growth that will be able to contribute to national income or Gross Domestic Product (GDP).

In accordance with the 2019-2024 Development Agenda, the active role of the millennial generation in the field of entrepreneurship can also support the improvement of the Indonesian economy. This also supports the government's efforts which are focusing on accelerating the implementation of development goals and priorities, one of which is focused on providing employment, increasing the productivity of Micro, Small, and Medium Enterprises (MSMEs), strengthening cooperatives, and developing entrepreneurship, "said Minister Bintang in the

Opening and the Inauguration of the IWAPI Millennial Series with the theme "Creativity and enthusiasm for building a business during a pandemic."

To maintain the economic value of millennials who run a business, there are several things that need to be considered, namely: (a) innovating products according to demand, (b) maximizing the use of social media and e-commerce, such as Shopee, Bukalapak, Blibli .com, Gojek, Grab, Tokopedia, etc. (c) increase digital literacy (Wasilah et al., 2021). The development of digital technology and access to information can bring negative impacts as well as opportunities for the current generation, so digital literacy is one of the solutions. Digital literacy ability is a skill that involves the ability to process information accurately from various sources, individual skills to socialize, have critical thinking as one of the digital competencies, and communicate ethically with others in various forms of media ((<https://bandungbermov.id/article/detail/2017/apakah-indonesia-has-ready-ready-to-meetera-society-5-0>), (d) increasing HR capacity through various competencies, coaching, and others. A professional and skilled workforce, according to market demands/needs, is a factor of excellence for a nation in facing global competition, and (e) lastly, is community development and development, especially the younger generation. As the main support in the wheel of development, empowering the younger generation is expected to create a generation that is creative, innovative, and highly competitive. It is these characteristics of the younger generation that are expected to be able to contribute and win global competition (Hidayat & Selvia, 2022).

4. Conclusion

As the main component of the digital economy booster, the millennial generation assists the government in increasing Indonesia's economic value. One way that can be taken is to become a digital-based business actor. The millennial generation, which is rich in creative ideas and breakthroughs, is agile and dynamic and is aware of the importance of technology, which is one of the main objects in expanding the digital economy in the world. This is certainly in line with the dynamics of increasingly advanced technological growth in a relatively short era of transformation. Entering the era of society 5.0, where the focus of development lies on the human aspect, the character and quality of human resources in the millennial generation must continue to be improved. Millennials who master science and technology can face competition in the 5.0 era. For this reason, it is essential to develop the positive characteristics of millennials to show their important role in the world of the digital economy.

5. References

- Adha, H. I., Asyhadie, Z., Kusuma R. (2020). Digitalisasi industri dan pengaruhnya terhadap ketenagakerjaan dan hubungan kerja di Indonesia. *Jurnal Kompilasi Hukum* 5(2), 268-298. <https://doi.org/10.29303/jkh.v5i2.49>
- Ahmad, A. & Nurhidaya. (2020). Media sosial dan tantangan masa depan generasi milenial. *Jurnal Ilmu Komunikasi*, 8(2), 134-148. <http://dx.doi.org/10.36080/ag.v8i2.1158>
- Firdhaus, F. & Apriani, R. (2021). Pengaruh platform media sosial terhadap minat generasi milenial dalam berinvestasi di pasar modal. *Jurnal Supremasi Hukum*, 17(2) 96-103.
- Kartika, R., Fasa, M.I., Suharto, S. (2022). Perkembangan ekonomi kreatif dikalangan generasi millennial muslim dengan melihat peluang di kemajuan zaman. *Jurnal Bina Bangsa Ekonomi*, 15(1), 257– 66. <https://doi.org/10.46306/jbbe.v15i1.150>
- Kuss, D. J., & Griffiths, M. D. (2012). Internet gaming addiction: A systematic review of empirical research. *International journal of mental health and addiction*, 10, 278-296.
- Nugraha, A. A. (2018). Generasi Milenial: Inovasi dan Pembangunan Indonesia. Tangerang: Pustakapedia.
- Perdana, A.P. & Yusuf, W. (2020). UU ITE Tentang efek media sosial terhadap generasi milenial. *Jurnal Kelitbangan*, 8(3), 297-308.

- Sunarta, D.A. (2023). Kaum milenial di perkembangan ekonomi digital. *Economic and Business Management International Journal*, 5(1), 9-16.
- Yudhistira, A., & Suryani, J. (2022). PELATIHAN DIGITAL MILENIAL: MILENIAL SEBAGAI GENERASI POSITIF DI ERA DIGITAL. *Jurnal Pengabdian Masyarakat Lamin*, 1(1), 41-50.
- Hidayat, J. F., & Selvia, S. (2022). Peran Generasi Milenial Dan Generasi Z Dalam Menghadapi Persaingan Global Di Era 5.0. In *Prosiding Seminar Nasional Manajemen* (Vol. 1, No. 1, pp. 7-12).
- Slavov, T., & Roeva, O. (2012). Application of genetic algorithm to tuning a PID controller for glucose concentration control. *Electronic journal: WSEAS Transactions on Systems*, 11(7), 223-233.
- Sari, S. (2019). Literasi media pada generasi milenial di era digital. *Professional: Jurnal komunikasi dan administrasi publik*, 6(2), 30-42.
- Serang, R. A., Christiani, Y. N., & Rane, M. D. (2021). Inovasi Pengembangan Ekonomi Digital Di Desa Mata Air. *Jurnal Pengabdian Kepada Masyarakat*, 1(1), 31-36.
- Sundari, C. (2019). Revolusi industri 4.0 merupakan peluang dan tantangan bisnis bagi generasi milenial di Indonesia. In *Prosiding Seminar Nasional Fakultas Ekonomi Untidar 2019*.
- Suwiryawati, N. K. D., Aprianingsih, N. K. D., Putri, N. L. G. D. E., & Pradnyawati, S. O. (2022). peran generasi z dalam pengembangan industri kreatif sebagai upaya penanggulangan kesenjangan ekonomi Bali di era society 5.0. *Prosiding Pekan Ilmiah Pelajar (PILAR)*, 2, 176-201.
- Wasilah, F., Mufid, A. K., Rosidi, I., Zulfani, N. A., & Faujiah, A. (2021). Optimalisasi peran generasi millennial dalam mengembangkan kewirausahaan berbasis digital (studi kasus usaha online bucket dan hampers). *ICO EDUSHA*, 2(1), 709-719.

Website

- <https://bandungbergerak.id/article/detail/2017/apakah-indonesia-telah-siap-menyongsong-era-society-5-0>.
- <https://aptika.kominfo.go.id/2022/11/akselerasi-transformasi-digital-pacu-pertumbuhan-ekonomi-digital>
- <https://dataindonesia.id/sektor-riil/detail/berapa-jumlah-umkm-di-indonesia>
<https://stakpnsentani.ac.id/2021/06/01/menapaki-era-super-smart-society/>
- <https://dataindonesia.id/digital/detail/apjii-pengguna-internet-indonesia-tembus-210-juta-pada-2022>
- <https://www.ekon.go.id/publikasi/detail/3154/partisipasi-generasi-milenial-dalam-era-digital-untuk-menjawab-tantangan-ekonomi-masa-depan>).
- <https://radarsolo.jawapos.com/pendidikan/28/10/2020/peluang-tantangan-generasi-milenial-dalam-menghadapi-era-society-5-0/>).
- https://www.kominfo.go.id/content/detail/42050/siaran-pers-no-210hmkominfo052022-tentang-google-proyeksikan-potensi-ekonomi-digital-indonesia-tahun-2025-capai-usd140-miliar/0/siaran_pers .