



Economic Digitalization And Network Society: Sociological Implications For Today's Network Society

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ABSTRACT

This research examines the broader sociological impacts of economic digitization on contemporary networked societies in Indonesia, amidst the accelerated social transformation due to the COVID-19 pandemic. Through literature review, it discusses how information and communication technology has become the primary enabler across various sectors of life, influencing consumer behavior and reshaping business structures. The research findings reveal that economic digitization not only redefines social interactions and business organization but also leads to the emergence of new phenomena in power dynamics, inequality, and social identity. The transition to technology-based business models also poses challenges in privacy, data security, and digital divide aspects. This article emphasizes the importance of inclusive policy responses to address sociological disparities and maximize digital economic opportunities. The research contributes significantly to contemporary sociology studies by highlighting the importance of equitable digital infrastructure development and digital literacy to ensure inclusive socio-economic sustainability in the networked era.

INTRODUCTION

Understanding digitization in the economic field leads us to analyze its causes and sociological impacts. Information and Communication Technology (ICT), including the internet, and the COVID-19 pandemic in this context serve as tools to examine agents of change and their impacts on various layers of society, especially in the economic sphere. This shift not only reconfigures market structures and work paradigms but also generates new discourses as borderless business organization models (Rochman Achwan, 2022) and creates digital divides. The digital economy is like a double-edged sword; it can have both positive and negative impacts. The digital economy can positively impact economic productivity, enhance economic growth, and serve as a beneficial foundation for all segments of society. On the other hand, the digital economy can also have negative impacts, including technological misuse such as online

fraud that can harm many parties and the misuse of communication media that violates societal norms (Maria & Widayati, 2020). Thus, this poses a challenge for all stakeholders, including businesses, society, and even governments. This situation demands comprehensive policy responses to optimize the benefits of digitization, especially in the economic sphere, and minimize its risks, thereby creating a more inclusive society and sustainable economy.

Therefore, this research aims to analyze the phenomena of economic digitization and network society, two concepts that have garnered attention in contemporary sociology studies. Economic digitization, referring to the operation of the economy based on digital technology, and network society, which describes a social structure dominated by extensive and complex information networks, both represent significant phenomena in the era of globalization and digitization.

The motivation behind this research lies in the observation that despite numerous literatures discussing the impacts of digital technology on the economy and society separately, there is still a need for a deeper understanding of how these two domains are interconnected and impactful. Thus, this research aims not only to bridge the literature gap but also to provide insights into the dynamics of power, inequality, and social change resulting from the interaction of digital economy and network society from a sociological perspective.

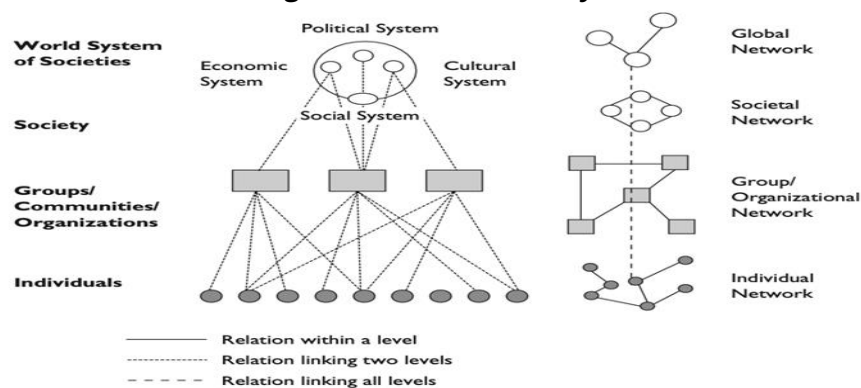
This research is important because its findings are expected to contribute to our understanding of the social impacts of digital technology and offer valuable insights for policymakers, industry practitioners, businesses, society, and the academic community in addressing challenges and harnessing opportunities presented by the current digital economy and network society.

LITERATURE REVIEW

Network Society

In the modern information era, the intensity of information processing across various aspects of life has led to the emergence of a new type of society. The main characteristic of this change is the semi-autonomous nature of information processing. Most activities in contemporary society are now dedicated to tools or means of processing and producing information, sometimes diverging from their ultimate goals and having their own momentum and reasons for existence. The concept of a network society emphasizes the form and organization of information processing and exchange. The infrastructure of social networks and media plays a crucial role in this regard. Thus, the network society can be defined as a social formation with social network and media infrastructures that enable its main organizational mode at all levels, ranging from individuals, groups/organizations, to global society. Over time, these networks connect all units or parts of this formation, be it individuals, groups, or organizations (van Dijk, 2016).

Figure 1 Network Society



Van Dijk compares the network society with the mass society that preceded it. The mass society is defined as a social formation with infrastructure consisting of groups, organizations, and communities that form the organizational mode at all levels, ranging from individuals to the broader society. The basic unit of this formation is various large groups that organize individuals. Meanwhile, Webster (2014) concluded that the definition of the information society refers to the increased amount of information, information products, information work, communication facilities, and so forth, but fails to identify the underlying characteristics of this type of society. (Castells, 1996) also rejects the concept of the information society. Instead, he proposes the concept of the "informational society," which is a specific form of social organization where the generation, processing, and transmission of information become the main sources of productivity and power. Castells also states that informational capitalism is formed as a result of the transformation of capitalist systems caused by the advancement of information technology.

Networks At All Social Levels

(van Dijk, 2016) emphasizes the importance of social networks supported by media networks available at all levels and subsystems of society. Four levels can be distinguished:

1. Individual relationships

This level corresponds to the general meaning of networks (social), where individuals create bonds with family members, friends, relatives, coworkers, neighbors, and so on. Currently, this level is supported and reinforced by the emergence of internet media networks (email) and mobile phones.

2. Group and organizational relationships

Individuals create various types of groupings or collective institutions, some temporary and loose (such as project teams and mailing lists) and others permanent and stable (institutions and companies). All contemporary groupings are supported by telecommunications and computer networks. They tend to loosen the structures of permanent group organizations because they allow for virtual organizations at every scale. Internally, many organizations have become network organizations of mostly independent teams and projects. Externally, they come together to form virtual network organizations that are more or less independent of spatial, temporal, and physical conditions because these conditions are replaced by information and communication technology networks. This level is supported by communication and computer technologies that facilitate virtual organizational structures and cooperation in specific tasks.

3. Relationships with society

Individuals, groups, and organizations form a society connected by social and media networks. This applies to all subsystems of society. People increasingly use the phrase 'network economy,' sometimes called the 'new economy.' In politics, there is a 'network state' where the state connects government bodies and public administration institutions at every level. In the cultural field, the internet has created a wide hyperlink structure of sources and artifacts of human activity.

The social infrastructure of interpersonal and group relationships has been strengthened by the increasingly strong links between social networks and telecommunication networks using email and mobile phones.

4. Global relationships in the world system of societies and international organizations

We enter the era of the global web as described in the previous section. This is created by the expansion of international relations and the expansion of the scale of international organizations. Both are strongly supported by international broadcasting, telecommunications, and computer networks.

Informational Capitalism And Economic Digitization

Informational capitalism, developed by (Castells, 1996), is an analytical framework used to understand social, economic, and technological changes in the era of globalization and digitization. In his work "The Information Age: Economy, Society, and Culture," Castells identifies the transition from the industrial era to the information era has created a new form of capitalism where knowledge-based production and information technology become dominant. The information era is characterized as an era where the ability to access, process, and distribute information becomes critical to economic and social power. Castells also highlights how networks become the dominant organizational form of informational capitalism. These networks are global and interconnected, facilitating rapid and efficient information flow. This creates conditions for a highly dynamic and adaptive economy, often disregarding geographical and political boundaries. He also argues that although information technology creates new opportunities, there is also an increase in economic and social inequality. There is what is called the 'space of flows' and 'space of places.' 'Space of flows' refers to the global elite community that is connected and prosperous, while 'space of places' includes those who are marginalized and disconnected from the global economy.

In the 21st century, technology began to color consumerism. Consumerism has now become an integral part of society's identity. The emergence of the internet and accompanying technologies with traditional consumerism has made the process much more efficient and easier for consumers. With technology, offering goods or services can be done through attractive, secure, convenient, practical, cheap, heavily promoted, fast, and efficient applications. The standard of society's consumption has shifted from needs-based standards to limitless standards. Businesses are driven to continually create pseudo-needs for consumers because the capitalist economic system requires businesses to grow (Waryanto & Sukasri, 2022). If pseudo-needs are constantly created, then there is no specific critical point reached. If consumption is the lever to boost the economy, then governments and businesses will continue to promote it regardless of the adverse effects of rapid consumerism on matters other than the economy (Phil Belpasso, 2021).

METHODS

This research uses a library research approach. Zed (2003) states that library research is a series of activities that include literature data collection methods, reading and note-taking processes, and research material processing. Through library research, the study examines theoretical, reference, and other scientific literature related to the culture, values, and norms that develop in the social situation being studied (Sugiyono, 2013).

The data sources used in this study come from secondary data in the form of journal articles, books, internet sources, and publications related to the research topics: digital economy and network society.

RESULTS AND DISCUSSION

Covid-19 Pandemic, Technology, And Economic Digitalization

The Covid-19 pandemic has opened a new chapter in human history, marking a turning point in social interactions and human-environment relationships. As outlined by (Castles, 2003; Maton, 2000), humans have undergone profound social transformations due to the pandemic, a process where habits and social attitudes undergo changes. This transformation does not occur in a vacuum; social structures and the environment influence each other, a concept reinforced by Giuseppe Viola (2015), who emphasizes that changes in society can trigger changes in the environment. This can be observed in the spread of the coronavirus, suspected to originate from

human interactions and the natural environment in China some time ago. Global environmental changes have a significant impact on creating social transformations that change social structures. Changes bring about societal transformations. Social networks also contribute to social adaptation and transformation (Barnes et al., 2017).

In the context of Indonesia, as recorded by BPS with a 2.07 percent economic decline in 2020, technological adaptation becomes the key to survival. Online-based activities, especially in the economic sector, have dramatically increased, utilizing technology to replace limited physical interactions. Yusufah (2022) notes how digitalization has enabled the economy to operate faster, more organized, and efficient, creating a conducive economic climate for recovery. Technology also drives digitalization and automation in the economy, so the term digital economy is no longer something new in Indonesia. This is evident from the proliferation of e-commerce, fintech, and start-ups among the public. It can be said that the digital economy is developing, and the pandemic accelerates the development of economic digitalization, which may only change in 10 years, but changes appear faster.

Based on the report titled Digital Economic Outlook released by Bain Analysis, the e-commerce sector experienced the largest growth during the pandemic compared to other digital economy sectors. The e-commerce sector recorded a growth of 52 percent, followed by the online media sector 48 percent, food and transport 36 percent, and online travel 29 percent. This proves that despite the pandemic at that time, micro, small, and medium enterprises (MSMEs) were able to utilize online shopping platforms to develop their businesses. This then reflects relevantly when referring to (Lazarev et al., 2021), stating that digitization and digitalization emphasize technology, but digital transformation is broader, encompassing business strategies and models that utilize digital innovation. This becomes highly relevant in the context of an internet-connected economy (internetworked economy), which is a prerequisite to remain competitive in the era of globalization (Mutiarazora, 2021). Therefore, it can be said that businesses capable of surviving during the pandemic are those successful in adopting or transforming digitally.

Informational Capitalism, Technology, And Economic Digitalization

The Covid-19 pandemic, along with the massive use of information and communication technology including the internet, reinforces the impact of the digital economy as a borderless business organization model, which is a nification process, namely the transition from factory workers to uberization, a business model that no longer requires a specific location to work. In the future, there is a tendency for these digital economic platforms to become super platforms that dominate data ownership, have global reach, super exploitative, and very powerful as a result of the significant transformational events currently taking place (Rochman Achwan, 2022).

The Covid-19 pandemic has accelerated digitalization in many economic sectors in Indonesia, forcing companies and individuals to adapt quickly to information technology. When physical interactions become limited, digital networks become essential tools to maintain economic and social activities. This creates a deeper transformation towards the "informational society" described by Castells (1996), where information processing and transmission become the main sources of productivity and power. In this context, information technology infrastructure becomes critical in determining access and power. Informational capitalism, as proposed by Castells (1996), is formed through the transformation of capitalist systems driven by the advancement of information technology. This indicates that the Indonesian economy may undergo a similar shift, with companies adopting information technology becoming more dominant.

The network society, as outlined by van Dijk (2006) and Castells (1996), is directly related to the conditions during the pandemic. These networks, increasingly interconnected and complex, allow information and resources to flow in new and often unpredictable ways. Economic

digitalization not only brings convenience and efficiency but also new challenges, such as digital divide, privacy issues, and data security.

Sociologically, the pandemic has clarified that strong and flexible social and economic networks are essential for community resilience. Organizations that can leverage these networks for innovation, communication, and collaboration are most likely to thrive. The pandemic has ultimately acted as a catalyst for changes that may have been long overdue, accelerating the transition towards a more connected and informational society. In Indonesia, this may also indicate a shift towards a more technology-based business model with broad implications for the workforce, education, and public policy. The Indonesian Ministry of Finance predicts that the Indonesian economy could gain up to \$2.8 trillion by 2040 through technology adoption, adding to the annual GDP growth (Liu and Bakara, 2022).

Economic Digitalization And Network Society At Various Levels

In the context of Indonesia's network society, van Dijk (2006) emphasizes the importance of social networks supported by four media networks at all levels and subsystems of society. At the individual level, digitalization allows individuals in Indonesia to maintain social relationships despite physical restrictions. Social media, communication apps, and e-commerce have become essential in daily life, supporting social and economic interactions. In Indonesia, economic digitalization has facilitated the development of the gig economy, as seen in the popularity of apps like Gojek and Grab. Individuals can now engage in flexible work through these platforms, connecting them with economic opportunities without limitations of physical location. At the group and organizational levels, organizations in Indonesia are transforming to become more flexible by adopting digital technology. Remote and virtual work models have become common, enabling collaboration without being tied to traditional physical spaces and working hours. In the context of the digital economy, companies like Tokopedia and Bukalapak in Indonesia have transformed the retail landscape by enabling small and medium enterprises to sell online, reducing dependence on physical stores and developing their own virtual distribution networks.

In relation to society, Indonesian society as a whole has undergone structural changes towards a "network economy" where digital transactions and online public services become the norm. This affects how public services are delivered and how communities participate in the economy. Programs such as "Village Map" or "Digital Village" utilize information technology to improve village services, examples of how digitalization can enhance community participation and public service efficiency. While at the global level, Indonesia is more deeply integrated into the world system through the digital economy. Indonesian technology companies are beginning to expand into global markets, while foreign investment in the local digital economy is increasing. For example, economic digitalization has allowed Indonesian startups like Traveloka to grow into regional players, showing how local technology companies can expand their business reach into global markets through digital networks.

A crucial part of what is outlined in the above paragraphs is that digitalization strengthens and sometimes recreates social networks at all levels, influencing identity, community structure, organizational dynamics, and participation in the global system. In Indonesia, digitalization has been a catalyst for innovation and economic growth, but it has also created new challenges such as the digital divide and data security issues. This advocacy is not only based on the history of the resurgence of media networks used at every level but also on the fundamental view of the composition and (infra)structure of society. Such a fundamental view is developed in Kontopoulos's methodological and conceptual book, "The Logics of Social Structure" (1993). According to him, the world must be analyzed as a structure of levels. 'Levels are not juxtaposed layers; each level roots in lower levels, down to chemical and physical levels. Therefore, the analysis of economic digitalization in Indonesia at the same level or intra-level must be complemented and enriched with cross-level or inter-level analysis.' This is because at each level,

certain characteristics emerge that only apply at that level (individual, group, organization, society, world system).

CONCLUSION

Economic digitalization should be seen as a double-edged sword, as it can have both positive and negative impacts. Economic digitalization can have a positive impact on increasing a country's economic productivity, as well as boosting its economic growth, and serving as a beneficial foundation for all segments of society. On the other hand, economic digitalization can also have negative impacts, including misuse in technology such as online fraud that can harm many parties and the misuse of communication media that violate societal norms (Maria & Widayati, 2020).

In the context of networked society in Indonesia, economic digitalization has accelerated the transition to a more connected and informational society, with organizations leveraging networks for innovation, communication, and collaboration tending to thrive more rapidly. Digitalization has strengthened and sometimes recreated social networks, influencing identity, community structure, organizational dynamics, and participation in the global system. In this context, changes in consumer behavior become significant as technology enables more efficient and convenient transactions, paradoxically resulting in digital divides and data security issues.

Thus, this poses a challenge for all stakeholders, including businesses, society, and even the government. There are several sociological challenges that the author captures from the phenomenon of economic digitalization and its relationship with the network society:

1. Digital divide and social identity: The development of the digital economy has deepened the 'space of flows' benefiting global elite communities, while the 'space of places' covering marginalized communities has become increasingly isolated from the global economy, affecting social identity and economic inclusion.
2. Structural transformation: Digitalization has configured market structures and work paradigms, leading to new discourses in unlimited business organization models and creating digital divides that indicate changes in social composition and power dynamics.
3. 'Nikefication' to 'uberization' process: The transition from industrial models to platform-based digital business models demands social and economic adjustments, where super platforms dominate data ownership and have highly exploitative global reach.
4. Public service changes and economic participation: The adoption of virtual work models and digital transactions has changed how public services are delivered and how society participates in the economy.
5. Implications for labor and education: The shift to technology-based business models requires transformations in the workforce and education systems to adapt to the new needs of the digitized economy.

SUGGESTION

The author recommends several policy options that the Government can undertake to respond to the sociological implications of the phenomenon of economic digitalization and network society:

1. Digital inclusion policy: Expand internet access and enhance digital literacy, especially in remote areas, to reduce the digital divide and ensure more equitable economic participation.
2. Data protection and privacy: Develop strong cybersecurity frameworks to protect citizens from data breaches and technology misuse.
3. Regulation of digital platforms: Regulate digital platforms to prevent exploitation and ensure fair distribution of benefits between platform owners and users.
4. Support for MSMEs in digital transition: Provide resources and training for MSMEs to adapt to the digital economy, including access to digital markets and online sales technology.

5. Education and labor reform: Reform the education system to include digital and information technology skills and develop labor policies that support workers in the gig economy.
6. Digital collaboration facilities: Encourage the formation of virtual organizations for innovation and collaboration unrestricted by physical limitations.

By adopting the right and comprehensive policies to optimize the benefits of digitalization, especially in the economic field, and minimize its risks, governments can ensure that all layers of networked society in Indonesia can take advantage of the equal opportunities created by the network economy.

REFERENCES

- Barnes, M. L., Bodin, Ö., Guerrero, A. M., McAllister, R. R. J., Alexander, S. M., & Robins, G. (2017). The social structural foundations of adaptation and transformation in social-ecological systems. *Ecology and Society*, 22(4).
- Castells, M. (1996). The space of flows. *The Rise of the Network Society*, 1, 376–482.
- Castles, S. (2003). Towards a sociology of forced migration and social transformation. *Sociology*, 37(1), 13–34. <https://doi.org/10.1177/0038038503037001384>
- Lazarev, G. I., Tat'ayna, V. V., & Andreev, V. A. (2021). Digital transformation of russian economy: challenging the highest rank in the global innovation development. *Nexo Revista Científica*, 34(01), 74–81.
- Maria, N. S. B., & Widayati, T. (2020). Dampak perkembangan ekonomi digital terhadap perilaku pengguna media sosial dalam melakukan transaksi ekonomi. *JKBM (Jurnal Konsep Bisnis Dan Manajemen)*, 6(2), 234–239. <https://doi.org/10.31289/jkbm.v6i2.3801>
- Maton, K. I. (2000). Making a difference: The social ecology of social transformation. *American Journal of Community Psychology*, 28(1), 25–57. <https://doi.org/10.1023/A:1005190312887>
- Mutiarezora, M. (2021). Tranformasi Ekonomi Berbasis Digital. *Journal of Economics and Regional Science*, 1(2), 84–96. <https://doi.org/10.52421/jurnal-esensi.v1i2.189>
- Phil Belpasso. (2021, April). Digital Consumerism: How Consumption has Shifted. Cardinal Scholar.
- Rochman Achwan. (2022, October 22). Guru Besar Sosiologi: Krisis Dan Transformasi Besar Melahirkan Terobosan Baru. Fisip.Ul.
- Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D. https://digilib.unigres.ac.id/index.php?p=show_detail&id=43
- van Dijk, J. (2016). *The network society*. Sage London.
- Waryanto, P., & Sukasri, A. (2022). Kapitalisme, Teknologi, dan Konsumerisme. *Subjek-Subjek Algoritmik: Perspektif Sosiologi Tentang Dunia Digital-Jejak Pustaka*, 1, 9. [https://books.google.co.id/books?hl=id&lr=&id=GU2mEAAAQBAJ&oi=fnd&pg=PA9&dq=Waryanto+dan+Sukasri.\(2022\).+Subjek-Subjek+Algoritmik:+Perspektif+Sosiologi+T&ots=p1CARPolje&sig=Ofk6e1IcY_X9LHk8dL3-uf8kzul&redir_esc=y#v=onepage&q&f=false](https://books.google.co.id/books?hl=id&lr=&id=GU2mEAAAQBAJ&oi=fnd&pg=PA9&dq=Waryanto+dan+Sukasri.(2022).+Subjek-Subjek+Algoritmik:+Perspektif+Sosiologi+T&ots=p1CARPolje&sig=Ofk6e1IcY_X9LHk8dL3-uf8kzul&redir_esc=y#v=onepage&q&f=false)