The Networked Society and Social Disintegration: A Study on the Impact of Digital Transformation on Social Structure

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Received:14./09/2025 *Accepted: 30./11/2025* *Published:26./01/2026*

Abstract:

The contemporary world is experiencing profound transformations driven by the digital revolution, giving rise to a networked society where social relations transcend time and place. This has reconfigured traditional social structures and generated new forms of social disintegration. The central question addressed is the extent to which the networked society, as a product of digital transformation, contributes to reinforcing or reproducing such disintegration in contemporary societies. The study highlights the dialectical relationship between digital transformation and social change, seeking to connect classical sociological approaches to disintegration (Durkheim, Parsons) with Manuel Castells's perspective on the networked society. It offers a contemporary sociological reading of digitalization's effects on the family, solidarity, and social integration, particularly within the Arab context. The objectives are to analyze the dimensions of the networked society, interpret disintegration in this framework, and assess the digital divide's role in deepening inequalities, ultimately proposing pathways toward fostering integration.

Keywords: Digital transformation, networked society, social disintegration, digital divide, digital sociology, family, social solidarity.

1. INTRODUCTION

Digital transformation is no longer merely a technical tool to facilitate communication or accelerate the exchange of information; instead, it has become a structural force reshaping modern societies across their economic, political, cultural, and social dimensions. With the widespread use of digital media and the proliferation of the internet, social relations have gradually shifted from the physical realm to new virtual spaces, forming communicative networks that transcend geographical and temporal boundaries. Manuel Castells termed this phenomenon the "networked society." This profound transformation in patterns of social interaction has generated complex dynamics. While it has created vast opportunities for communication and openness, it has simultaneously contributed to weakening certain forms of traditional solidarity and dismantling direct social bonds.

Amid these transformations, the question of social disintegration emerges with urgency: has digitalisation fostered new forms of social disintegration through excessive individualisation and diminished affiliation with traditional groups? Or has it redefined patterns of solidarity into new, more flexible networks adapted to the realities of the age? Attempting to answer this question necessitates revisiting classical sociological approaches that examine phenomena (such as those of Durkheim and Parsons) and linking them with Castells's perspective on the networked society, thereby allowing for a deeper understanding of the dialectical relationship between digital transformation and social change.

Research Objectives:

This paper aims to:

1. Analyse the concept of digital transformation and elucidate its sociological dimensions beyond a purely technical framework.
2. Clarify the characteristics of the networked society as formulated by Manuel Castells and relate them to current social transformations.
3. Interpret the manifestations of social disintegration in light of digital transformations, with a focus on family, social solidarity, and integration.

4. Examine the impact of the digital divide on the reproduction of social inequalities and the consolidation of new forms of exclusion.
5. A critical perspective that seeks to direct digital transformation towards strengthening social integration and reducing factors of disintegration is proposed.

2. Theoretical and Conceptual Framework

2.1 Digital Transformation

Digital transformation refers to a set of initiatives that shift organisations away from manual and analogue operations towards digital processes in nearly every aspect of business, including supply chain management, financial administration, payroll, human resources, customer service, sales, and marketing. The first step in such initiatives is often digitisation, the process of converting information into a digital format, for instance, scanning a contract or paper invoice and turning it into a digital file. Once computers can read and process the data, companies can embark on digitalisation, which entails replacing legacy processes and systems to automate workflows, enhance efficiencies, increase employee productivity, and achieve desired business outcomes.

Some companies pursue digitalisation to seize growth opportunities or respond to intensifying competitive pressures, whereas others are driven by the need to keep pace with evolving regulatory standards. In the public sector, projects are frequently motivated by the aim of conserving resources while providing better services to citizens. Regardless of the underlying motive, business and IT leaders planning these initiatives must envision new ways for their organisations to leverage technology, people, and processes to anticipate and adapt to changing market conditions (Tsedolko).

Digital transformation is thus a comprehensive redeployment of digital technologies to enact fundamental changes in operational models, service delivery methods, and management mechanisms within organisations, thereby improving efficiency, developing new business models, and enhancing competitiveness (Al-Khalidi, 2020).

According to Abdelhamid, digital transformation is not merely the “mechanisation” of traditional procedures; rather, it represents a strategic

shift that redefines organisational culture and alters the nature of professional and social relations within the work environment (Abdel-Hamid, 2019).

2.2 The Networked Society

Manuel Castells defines a networked society as a social structure based on networks operated through information and communication technologies built upon microelectronics. This new form of society emerged as a result of the interaction of three distinct historical processes: the crisis of industrial society and the restructuring it necessitated, the rise of social movements oriented towards freedom and democracy, and the revolution in information and communication technologies. The convergence of these factors produced a new organisational model of social life, which became known as the network society (Castells, 2006).

Castells employed the term to refer to a new framework for understanding post-industrial society, arguing that this society is founded upon informational capitalism rather than industrial capitalism and upon virtual culture. He presented it as an alternative to the concept of post-industrial society, characterising the fundamental transformations affecting all environments and institutions of the industrial era. The possession of information and the networked structure through which it is organised serve as instruments of dominance, benefiting certain states while simultaneously contributing to the fragmentation of shared identities and the creation of a shared global identity (Al-Ghazwani, 2020).

Van Dijk, in turn, noted that social organisation in a networked society is based on horizontal networking and flexibility, replacing the rigid hierarchies and structural inertia characteristic of the industrial society. This makes networks more capable of adapting to rapid changes. Among the most prominent characteristics of the networked society identified by Van Dijk are decentralisation, the accelerated flow of information, the overcoming of temporal and spatial constraints, and the possibility of constructing identities and relationships within digital spaces that transcend borders (Van Dijk, 1991).

2.3. Social disintegration

Social disintegration refers to a state of disorder and imbalance within

a society, arising when forces of disorganisation outweigh stabilising factors. This condition creates a gap between social goals and the behavioural norms intended to guide their attainment. Such an imbalance leads to the weakening and fragmentation of the social structure, paving the way for numerous societal problems. In these circumstances, customs and mechanisms of social control lose their effectiveness in maintaining cohesion, whereas social institutions fail to consolidate their internal bonds or regulate their activities, thereby diminishing their efficiency in fulfilling their functions. In general, social disintegration reflects the inability of the social system to adequately define the roles and interdependent positions of individuals in a way that enables them to achieve their goals satisfactorily.

Terminologically, the *Dictionary of Social Science Terms* defines it as *"The inefficiency or failure of the social system to determine the positions and interrelated roles of individuals in a manner that ensures the satisfactory attainment of their objectives"* (Badawi, 1982).

That is, the social system is unable to preserve and fulfil the desired objectives of individuals; in other words, individuals occupying certain positions within the social structure do not adequately perform their roles to achieve the goals of society (Ghaith).

2.4. The Digital Divide

The digital divide is defined as a manifestation of contemporary social inequality, characterised by disparities among individuals or groups in their opportunities to access and effectively utilise information and communication technologies. This disparity is influenced by several determinants, including income level, the availability of digital infrastructure, technical capacities and skills, and broader social and economic differences. As a result, significant gaps emerge in benefiting from knowledge resources, participating in digital spaces, and achieving inclusive development.

It is also defined as the gap between those who possess the ability to access information and communication technologies and those who lack this ability, whether due to limitations in infrastructure, skills, or social opportunities (Norris, 2001).

Accordingly, the digital divide is a state of social and cognitive inequality, reflected in disparities among individuals, groups, or nations in their ability to access information and communication technologies, acquire the necessary digital skills, and effectively benefit from digital resources in areas such as education, employment, and community participation. It is a multidimensional phenomenon encompassing three interconnected levels:

1. **Physical access to technology** – infrastructure, devices, internet connectivity, and related resources.
2. **Acquisition of digital and cognitive skills** – enabling effective and meaningful use of technology.
3. **Applications and socioeconomic utilisation** – determining the degree of benefit derived from technology.

At its core, the digital divide reflects the persistence of traditional social and economic disparities, which are reproduced within the digital environment, resulting in the exclusion of certain groups from full participation in the networked society.

3. The Impact of Digital Transformation on the Social Structure

Digital transformation constitutes a pivotal force in reshaping social structure, as it reorganises relationships among individuals and groups and fosters new forms of social and cultural interaction. It contributes to the formation of new cultures and digital identities, enabling individuals to express themselves in diverse ways that transcend traditional constraints while simultaneously altering daily life patterns, including modes of education, work, and family and social communication.

Furthermore, digital transformation enhances access to information and social services, such as telehealth, distance learning, and e-government services, facilitating participation and integration into the digital society. However, this transformation is accompanied by notable social challenges, most prominently the widening of socioeconomic divides among different groups, the weakening of certain traditional bonds such as family and community ties, and the emergence of value conflicts arising from tensions between traditional norms and the demands of modern digital life. Consequently, digital transformation emerges as a dual-faceted phenomenon: it offers vast opportunities for connectivity and knowledge

but simultaneously imposes the imperative to address its profound social and cultural repercussions.

3.1. Positive impacts of digital transformation on society

- **Strengthening Communication and Relationships**

Digital transformation has facilitated communication among individuals, families, and communities through various digital means, such as social networks, email, and instant messaging platforms. This has contributed to expanding virtual relationships, enhancing the exchange of information and expertise, and enabling cooperation among individuals regardless of geographical distance (Castells, 2001).

- **Development of Social Services**

Digital transformation plays a key role in improving the quality of social services by establishing advanced digital infrastructure, training human resources to use technology effectively, and increasing the efficiency of access to these services. This includes telehealth, distance education, and e-government services, all of which contribute to promoting social justice and reducing disparities in access to resources (OECD, 2020).

- **Facilitating Access to Information and Knowledge**

Access to digital information has become faster and more accurate, with efficient exchange and sharing among users. This supports innovation, sustainable development, and evidence-based decision-making. It also enables individuals and institutions to utilise databases and various digital resources to develop skills, advance scientific research, and enhance strategic planning.

- **Creating new economic and professional opportunities**

Digital transformation fosters innovative job opportunities and supports entrepreneurship across different economic and social sectors. Digital platforms and modern technologies provide individuals and organisations with tools to develop new products and services, thereby increasing earning potential and improving living standards. Furthermore, it encourages innovation and creativity by offering a flexible digital environment capable of responding to evolving market needs, ultimately promoting social and economic inclusion for target groups.

- **Cultural Impacts of Digital Transformation**

Digital transformation contributes to reshaping the cultural fabric of society by influencing values, identity, and behaviours, particularly among youth. Digital platforms, such as social media, blogs, and interactive videos, provide spaces for self-expression and personal identity development, enabling individuals to engage with diverse cultures and exchange ideas and experiences in unprecedented ways. This digital openness fosters the emergence of new behavioural patterns and modern values aligned with digital transformations, such as innovation, collaboration, and openness to cultural diversity.

However, these changes are accompanied by challenges, including generational value differences and identity conflicts between cultural traditions and contemporary digital trends. These realities necessitate the development of strategies to guide digital culture in ways that maintain a balance between authenticity and digital openness.

3.2. Negative Impacts of Digital Transformation on Society

- **Exacerbation of Social Inequality**

Digital transformation has contributed to the redistribution of social and economic opportunities, whereby groups with access to technology and digital skills benefit from new advantages, such as remote education, teleworking, and access to digital markets. Conversely, groups lacking access to these resources face difficulties in improving their income or benefiting from digital services, leading to a widening economic and social gap. This phenomenon is particularly pronounced in developing countries, where limited digital infrastructure and unequal opportunities remain significant challenges (Van Dijk, 2020).

- **Decline of Family and Community Bonds**

The growing reliance on digital communication and virtual relationships has brought about profound changes in traditional social ties. Individuals, particularly young people, spend long hours engaging on social media platforms, which reduces face-to-face interactions and weakens family connections, such as participation in shared activities and daily in-person interactions among family members. This mode of interaction also affects broader community bonds by decreasing participation in social and

volunteer activities and diminishing the sense of belonging to local communities.

Moreover, digital dependency creates disparities in levels of social engagement across generations, as young people tend to immerse themselves in the virtual world, whereas older generations remain connected to traditional modes of communication. This dynamic has led to cultural and social gaps within families and communities. Such transformations may undermine the ability of traditional social institutions to perform their core functions, including socialising, strengthening family ties, and providing psychological and social support. These challenges call for policymakers to develop strategies that integrate digital technologies while preserving social cohesion.

- **Value Conflict in the Context of Digital Transformation**

Digital transformation directly contributes to the emergence of value conflicts between traditional values prevailing in physical society and the new values that arise in the digital sphere. Individuals, particularly young people, are increasingly exposed to multiple influences through the internet and social media, resulting in shifts in behaviours, interests, and personal beliefs. For example, traditional family or community values may contradict experiences or information acquired in the digital realm, such as modes of self-expression, moral concepts, and standards of success and personal freedom.

This disparity often generates internal tension among individuals due to the clash between traditional values and new digital norms, which may, in turn, affect their social integration and daily practices. Furthermore, the value gap between generations may widen, as young people adopt modern patterns of interaction aligned with the online environment, whereas older generations continue adhering to traditional values and norms. This divergence can sometimes lead to intergenerational conflict within families and communities.

Value conflict thus constitutes one of the most significant social and cultural challenges of digital transformation. This underscores the need to develop educational and pedagogical mechanisms aimed at guiding youth to

strike a balance between their traditional values and emerging digital values, thereby preserving social cohesion and fostering a critical understanding of the digital environment (Castells, 2001).

- **Psychological Risks of Digital Transformation**

Excessive use of digital technologies constitutes one of the psychological and social challenges associated with digital transformation, as overreliance on the virtual world can lead to a range of mental health disorders. Prolonged engagement with the internet or social media may increase the likelihood of depression, anxiety, loneliness, and sleep disturbances. Continuous interaction in digital spaces can also diminish attention and concentration, reduce the ability to communicate effectively in face-to-face settings, and weaken problem-solving skills in social contexts.

Moreover, immersion in virtual environments can create digital dependency, whereby psychological well-being becomes directly tied to interactions through digital media, heightening the risk of frustration and dissatisfaction when confronted with the realities of the physical world. Notably, younger age groups are more vulnerable to these risks because of their developmental stage and heightened sensitivity to the cultural and social influences of the internet (Twenge, 2017).

4. The Relationship between Networked Society and Social Disintegration

A networked society, founded upon digital infrastructure and information and communication technologies, constitutes a central phenomenon in the study of modern social transformations, exerting a dual impact on social structure. On the positive side, the networked society expands opportunities for social interaction and creates new spaces for self-expression, civic engagement, and cultural participation. It contributes to strengthening virtual social capital by facilitating the formation of social networks, the exchange of knowledge and expertise, and mutual support among individuals and communities, thereby fostering greater integration into both digital and social life. This expansion also enhances access to information and social services, such as distance education, telehealth, and e-government services, which in turn increases the efficiency of participation and societal inclusion.

Nevertheless, this digital expansion is not without potential adverse effects on traditional social bonds. Excessive or unregulated use of digital spaces may lead to social isolation, involvement in marginalised virtual communities, and the spread of misinformation or hate speech. It can also weaken family and community ties, exacerbate social polarisation, and create value conflicts between the traditional norms of offline life and the emerging values shaped within the digital world.

Thus, it becomes evident that the networked society represents a complex and paradoxical phenomenon. On the one hand, it offers vast opportunities for communication, knowledge exchange, and the development of social capital; on the other hand, it presents genuine challenges to traditional social structures, necessitating careful study of its effects and the implementation of measures to mitigate its risks and enhance its positive impact.

A networked society can contribute to social disintegration through the erosion of traditional social bonds, as the shift towards the internet and virtual communication often weakens relationships in the physical sphere, such as those within families and local communities. This leads to feelings of social isolation and detachment from reality. Digital social networks have dual effects on the social fabric. While they provide spaces for interaction and the expression of opinions, they may simultaneously facilitate the fragmentation of social cohesion in several ways.

Through the propagation of hate speech and ideological polarisation, shared social values erode, and tensions among different groups within society intensify. Prolonged engagement in insular virtual communities fosters greater social isolation, weakens familial and communal ties, and diminishes individuals' sense of belonging to their immediate environment. Furthermore, digital platforms contribute to the spread of misinformation and rumours, undermining social trust, fostering instability, and increasing the likelihood of manipulation and tensions among diverse social groups (Bakir & Andrew, 2018).

Moreover, mechanisms such as "likes" and "shares" may lead to digital exclusion and marginalisation by amplifying the visibility of certain

opinions at the expense of others. This dynamic alters patterns of social interaction and intensifies feelings of underappreciation or alienation among some individuals. Consequently, the networked society emerges as a pivotal force in reshaping social relationships; however, it is a force fraught with significant challenges that require continuous study to address its implications for social cohesion and cultural values.

On the other hand, it can also be argued that a networked society substantially contributes to strengthening social cohesion by expanding the public sphere and deepening interactions among individuals and groups. Social networking platforms provide new spaces for public discourse and civic and political engagement, allowing individuals to express their opinions and participate in discussions on societal issues, thereby fostering a sense of belonging and active citizenship. This contributes to building a more participatory and engaged society.

These platforms also facilitate the development of virtual social capital, enabling individuals to expand their social circles through friendships and professional and cultural networks and to gain access to social support, information, and economic and educational opportunities that may be limited in offline contexts. This, in turn, strengthens social bonds and community support networks.

Furthermore, social networks empower individuals, particularly young people, to express their opinions freely and engage in discussions on a wide range of values and ideas, thereby promoting intellectual diversity and creating a more open and adaptable public sphere. This fostered renewed dialogue between various age groups and cultural groups. Through participation in digital initiatives and virtual communities with shared goals, individuals cultivate a sense of shared identity and belonging to an active digital society, ultimately enhancing social cohesion within modern frameworks that align with contemporary digital transformations.

5. Recommendations

- **Recommendations for Addressing the Impact of Digital Transformation on Social Structure**
- Educational and training programs should be introduced to enhance skills for the responsible and safe use of technology. Raise awareness

among youth and families regarding moderate use of the internet and social media to reduce social isolation.

- **Bridging the Digital Divide**
- The digital infrastructure in remote and impoverished areas should be improved to ensure universal access to the internet and modern technologies. Support initiatives that empower economically disadvantaged groups to benefit from digital transformation.
- **Promoting Social Cohesion**
- Digital activities that strengthen family and community bonds, such as online educational and cultural projects, should be encouraged. Support initiatives that integrate digital environments with offline activities to reinforce social belonging.
- **Combining Misinformation and Hate Speech**
- Policies for monitoring digital content should be established, and awareness programs for fact-checking should be developed. Promote responsible digital platforms that uphold social values and minimise polarisation.
- **Respecting Cultural and Value-Based Differences**
- Foster intergenerational dialogue on digital technology use to preserve traditional cultural values while embracing modern digital transformation. Design programmes that guide digital behaviour to strike a balance between digital freedom and social discipline.

6. Conclusion

It may be said that digital transformation and the networked society constitute pivotal factors in reshaping social structure. Digital technologies have reconfigured modes of communication and interaction among individuals and groups, provided unprecedented opportunities for access to information and services, enhanced citizen participation in the public sphere, and fostered the emergence of flexible and diverse digital cultures and identities. These transformations have also enabled the creation of substantial virtual social capital, allowing individuals to expand their social networks and gain access to support, information, and opportunities that may be limited in offline life.

Despite these benefits, digital transformation is not without significant challenges that affect social cohesion. It contributes to the weakening of traditional family and community bonds, exacerbates socioeconomic disparities among different groups, and creates value conflicts between generations, as well as between traditional and digital norms. Moreover, excessive use of digital platforms may alienate individuals from their physical environments and lead to negative phenomena, such as the spread of misinformation and immersion in insular virtual communities, further eroding the social fabric.

For these reasons, there is an urgent need for social and educational strategies and policies aimed at achieving a balance between leveraging opportunities for digital transformation and preserving social cohesion and cultural values. This requires enhancing digital literacy, developing educational programs that combine technological proficiency with the strengthening of social relationships, and encouraging innovation while maintaining a focus on the human dimension. Through the adoption of such measures, the digital society can serve as a driver of social and cultural development rather than a force of structural disintegration or cultural loss, making the management of digital transformation a strategic imperative for twenty-first-century societies.

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