

# Digital Gap Analysis in Fragile Societies Affected by Conflicts and Wars

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## Digital Gap Analysis in Fragile Societies Affected by Conflicts and Wars

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This report comprehensively explores the complex dynamics of digital inequality within weak and fragile societies. The term "digital gap" refers to the disparity between individuals or communities with access to digital technologies and those without. The report highlights disparities in digitization, opportunities, and challenges, particularly in fragile environments—regions or countries experiencing political instability, conflicts, or economic hardships, where necessary infrastructure for effective digitization may be missing or at risk.

From this standpoint, understanding the context of fragility is crucial, exploring the unique challenges faced by societies characterized by instability, conflict, or economic difficulties. Consequently, studying the extent of the digital gap in these contexts—disparities in technology access, internet connectivity, and digital literacy—is essential. This is done through a multidimensional approach, considering social, economic, political, and cultural factors contributing to the current digital gap.

Additionally, examining the impact of the digital gap on various aspects of these societies, such as education, healthcare, and economic opportunities, underscores that digitizing systems in fragile societies presents both opportunities and challenges. While digitization has the potential to empower individuals, enhance communication, and improve service delivery, it requires addressing infrastructure

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limitations, bridging inequalities, ensuring privacy and security, promoting collaboration, and ultimately advocating for more inclusive and just digital policies to narrow the gap and enhance resilience and sustainable development.

Understanding the Context of Fragility in Societies: In the context of societal structures, fragility refers to a state of weakness and instability, making them susceptible to external shocks or internal pressures. Fragile societies are characterized by a lack of resilience, often stemming from factors such as political instability, conflict, economic fluctuations, social disruptions, and governance weaknesses. The term "fragility" indicates that these societies face challenges in maintaining stability and are prone to disruptions that can have profound and long-term effects across various dimensions.

Understanding fragility involves examining the interconnection between different factors contributing to the state of instability in a society. Political fragility, for example, may manifest in governance issues, corruption, or the absence of effective institutions. Economic fragility, on the other hand, may result from poverty, high unemployment rates, and dependence on a narrow range of industries. Social fragility could involve issues related to inequality, discrimination, or the breakdown of social cohesion.

In the context of digital divide research, understanding the fragility of societies becomes critically important. Fragile communities often face additional obstacles in accessing and adopting digital technologies due to the challenges imposed by their underlying weaknesses. These challenges may include disrupted education and healthcare systems, widespread barriers to internet access, among others. Therefore, contextual understanding of fragility helps frame the analysis of the digital divide by acknowledging the unique obstacles these communities face and the importance of addressing them.

Communities characterized by instability face countless unique challenges that can significantly impact their development, and understanding these challenges is of utmost importance for addressing the digital divide in such contexts. One of the key challenges is the volatility in political structures, where frequent changes in leadership, political unrest, or conflicts can disrupt political continuity and hinder the implementation of sustainable digital initiatives in such environments. Long-term planning for technological infrastructure and digital literacy programs becomes challenging and impractical in these settings.

Another significant challenge arises from the impact of instability on essential infrastructures. Conflicts and social disruptions often lead to the destruction of basic services, including communication networks and facilities. Rebuilding these infrastructures is not only a logistical challenge but also requires substantial financial resources, diverting attention and funds away from digital development efforts. Additionally, population displacement during conflicts can lead to a loss of communication and hinder access to educational and healthcare services.

Education is a key area profoundly affected by instability. Disruptions in education due to conflict or political turmoil can create a generation with limited education, hindering digital literacy and the ability to engage with advanced technologies, perpetuating a cycle of exclusion. Furthermore, instability may lead to a brain drain, with skilled professionals leaving the region, exacerbating the shortage of local expertise necessary for digital development.

Furthermore, economic instability and fragility can limit the available resources for digital infrastructure investments. In the absence of a stable economic foundation, societies may struggle to allocate funds for building and maintaining the necessary technological

backbone required for widespread digital access.

Understanding these unique challenges and addressing them is fundamental to designing effective strategies to bridge the digital gap in societies marked by instability. This necessitates a comprehensive approach considering the interconnected nature of political, economic, and social factors. The goal is to build resilience and create sustainable digital solutions capable of withstanding the challenges imposed by instability.

Disparities in technology access are multifaceted, particularly evident in societies characterized by instability. Understanding these disparities is crucial for addressing the digital gap and promoting comprehensive development. One significant aspect of this disparity lies in the unequal access to essential technological infrastructure, such as reliable electricity and internet connectivity, in regions facing instability. The infrastructure may be damaged or insufficient, limiting technology access and hindering the ability of individuals and communities to access digital resources.

Economic disparities play a pivotal role, often resulting from the uneven distribution of resources due to instability. Marginalized communities bear the brunt of economic challenges, leading to individuals in economically deprived areas lacking the financial means to acquire and maintain digital devices. This impedes their participation in the digital realm, exacerbating existing social inequalities.

Cultural factors also play a role, influencing technology access and acceptance in some societies, especially those facing instability. Cultural norms and beliefs may contribute to resistance or hesitation towards adopting new technologies. Addressing these cultural factors is essential for bridging the digital gap, promoting awareness, and ensuring that technology is viewed as an empowering tool rather than a source of disruption.

Gender disparities in technology access are widespread in many societies marked by instability. Women and girls may face methodological barriers to accessing and using technology due to cultural practices, limited educational opportunities, or restricted mobility, widening the digital gap.

To address these disparities, there is a need for comprehensive strategies that include investments in infrastructure, economic development, education, cultural awareness, and effectively understanding and mitigating the various factors contributing to the digital gap. This enables more equitable access to technology and empowers local communities in unstable societies.

The digital gap has profound implications for various aspects of societies, especially in the fields of education, healthcare, and economic opportunities:

#### 1. Education:

- Limited access to educational resources.
- Inequality in educational opportunities: The digital gap exacerbates existing educational inequalities. Students with limited access to technology may struggle to keep up with their peers, leading to an increasing gap in educational outcomes, perpetuating social and economic disparities across generations.

#### 2. Healthcare:

- Barriers to telemedicine.
- Decreased health awareness.

#### 3. Economic Opportunities:

- Limited access to online job markets.
- Entrepreneurial barriers.

#### 4. Social Inclusion:

• Isolation and marginalization: The digital gap can contribute to social isolation and marginalization when the world becomes more digitally connected. Those without access are excluded from crucial social networks, information flows, and civic participation opportunities.

#### 5. Civic Engagement:

• Limited access to information: Lack of digital access can restrict individuals' ability to access crucial information for civic engagement, including updates on local governance, voting procedures, and community participation opportunities.

Summary of the Digital Divide Report, Digitization in Fragile Environments issued by the Clingendael<sup>1</sup> Dutch Institute of International Relations:

The report discusses the concept of digitization and its impact on societies, noting that digitization represents a transformation in operating models and business practices, integrating newly acquired capabilities through value-added digital efforts. It provides an example of a small-town bookstore owner using online marketing and e-commerce platforms to digitize their inventory and transform their business in the digital age. The report also emphasizes the potential for increased productivity, economic growth, and efficiency gains through automation and artificial intelligence. Additionally, it highlights

https://www.clingendael.org/publication/digital-dichotomy

the challenges and opportunities presented by digital technologies in fragile and conflict-affected countries, such as overcoming local constraints and improving the business environment.

The impact of digitization on the business environment is diverse. It opens up broader horizons for market access and compensates for infrastructure deficiencies, contributing positively to shaping a favorable business environment. However, negative impacts are also evident, with disparities in digital adoption. Some benefit from digital opportunities due to their capabilities and skills, while others face challenges and difficulties. This disparity contributes to widening gaps in skills and knowledge, reinforcing economic and social inequality.

Furthermore, digital technologies raise issues of inclusivity and justice, as limited access to digital infrastructure and a lack of digital skills can significantly impact business development. In the context of financial services, significant challenges are evident, where individuals with significant financial resources can greatly benefit from digital technologies, while others face difficulties entering this market

In general, digitization embodies a mix of challenges and opportunities in the business environment. While it expands the horizons of opportunities, it also deepens disparities and exacerbates inequality gaps.

The report also discusses the dual impact of digital tools on communications and information security in fragile and conflict-affected countries. On the one hand, digital tools and social media empower civil society and local communities to resist oppressive regimes, providing a platform for expressing concerns and calling for change. However, these digital tools also reveal weaknesses in communication and information security, susceptible to exploitation

for surveillance and conflict escalation.

Digitization can enhance employment opportunities in fragile and conflict-affected areas but also increases inequality in labor markets. Fragility, conflicts, and weak rule of law contribute to informal and unregistered work, limiting access to social protection and fundamental rights. Through the gig economy facilitated by online platforms, digitization can create job opportunities and improve labor mobility. However, it can also undermine worker protection, contribute to wage disparities, and increase inequality and exclusion, especially in employment centers.

Limited access and skills in the digital economy perpetuate existing inequalities and hinder business environment development. The widening digital economy can exacerbate inequality by creating information inconsistencies and expanding the gap between effective participants and those left behind. Digitally literate individuals are likely to benefit from digital opportunities, widening the gap in skills and knowledge. Weak administrative structures impede effective policy-making and the organization of temporary economic jobs.

The report concludes with policy recommendations aimed at integrating digital inclusion principles into digital transformation strategies, emphasizing fair digital initiatives, adopting fair and conflict-sensitive digital policies, and highlighting the need for a balanced digitization approach while promoting innovation with adequate protection.

**Recommendations:** for policies related to digitization in fragile and conflict-affected countries are as follows:

### 1. Integrating the Principles of Digital Inclusion into Digital Transformation Strategies:

International development entities must prioritize enhancing stability and supporting peace-building efforts in digital inclusion strategies through digitization. This involves achieving a balance between the risks and benefits of digitization, utilizing it as a tool for empowerment, peace-building, and safeguarding human rights rather than for surveillance and control. There is a crucial emphasis on ensuring that digital services are accessible to all societal sectors and at reasonable prices.

#### 2. Adopting Digital Policies Considerate of Conflict:

The implementation of digital initiatives in federal communication sectors should be carried out with a profound understanding of local dynamics and interests to mitigate potential misuse or exacerbation of conflict. This involves conducting comprehensive assessments and ensuring digital readiness for potential conflict points. The importance of addressing infrastructure shortcomings and communication issues is highlighted.

#### 3. Investment in Digital Infrastructure:

Priority and investment should be directed towards developing robust digital infrastructure, including reliable internet connectivity and energy sources, to ensure access even in remote and vulnerable areas to essential technological resources.

#### 4. Collaboration with Stakeholders:

Collaboration with public and private sector stakeholders is crucial for financing and executing infrastructure projects focused on expanding reliable digital services to deprived areas. This lays the foundation for fair digital access.

#### 5. Implementation of Targeted Digital Literacy Programs:

Execution of targeted digital literacy programs to empower individuals in fragile communities with necessary skills for effective navigation and use of digital technologies. Collaboration with local educational institutions and non-governmental organizations is essential to design and implement training programs meeting specific population needs, ensuring digital skills are accessible to everyone regardless of socio-economic status.

#### **6.** Enhancing Community Engagement:

Promoting community involvement by engaging local communities in the development and execution of digital initiatives, ensuring that solutions are contextually relevant and meet the unique needs of each community. Establishing forums and consultations led by the community to gather input, identify priorities, and participate in solution creation. This comprehensive approach ensures that digital policies resonate with the diverse needs of fragile communities.

#### 7. Promoting Inclusive Economic Growth:

Leveraging digital technologies to create job opportunities, especially for marginalized groups, through collaboration with companies and entrepreneurs to develop and support digital platforms connecting local goods and services to broader markets. This can stimulate economic development and empower individuals to participate in the digital economy.

#### 8. Advocating for Inclusive Digital Access and Use:

Calling for policies prioritizing inclusivity in digital access and use, recognizing the unique challenges faced by fragile communities. Engaging with policymakers and international organizations to

increase awareness of the importance of digital inclusivity. Proposing and supporting policy frameworks that prioritize bridging the digital gap in fragile contexts.

#### 9. Establishing Mechanisms for Monitoring and Evaluation:

Creating mechanisms for monitoring and evaluating the impact of digital initiatives to effectively bridge the gap and contribute to the resilience of fragile communities. Conducting regular assessments, gathering feedback from communities, and adjusting strategies based on real-time data. This iterative approach ensures that interventions remain responsive to evolving needs.

By combining these recommendations, a roadmap will be available for policymakers, non-governmental organizations, and other stakeholders to address the digital divide in fragile communities. This will promote resilience, empower communities, and contribute to sustainable development through comprehensive digital policies and initiatives.

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