

# Digitalizing at the Expense of Others: The Hidden Costs of Digital Welfare

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## Abstract

The digital transformation of welfare states is often celebrated for its potential to enhance service efficiency and accessibility. However, this shift carries significant, yet underexplored, social, and economic costs that disproportionately affect both local and global communities. This research seeks to uncover the hidden costs of digitalization in welfare states, illustrating how these changes can exacerbate existing inequalities and foster new forms of exclusion. Focusing primarily on the impact within the welfare states themselves, the analysis reveals how vulnerable populations may experience decreased access to crucial services due to digital barriers. Furthermore, the paper extends the analysis globally, demonstrating how the digitalization processes rely on, and sometimes exploit, international labor and resources, echoing the dynamics of externalization described by Stephan Lessenich in his critique of Western prosperity. By integrating theories of digital exclusion with global inequality frameworks, this research contributes to a more comprehensive understanding of the socio-economic repercussions of digital welfare practices and calls for a critical reevaluation of how these technologies are implemented.

**Keywords:** Digital transformation, Externalization, Digital Welfare, Globalization

## Introduction

In recent years, the digitalization of welfare states has been heralded as a transformative shift towards more efficient and accessible public services (Nixon and Koutrakou 2007, Schou and Hjelholt 2018, Panait and Rădoi 2022). However, beneath the surface of these technological advancements lie significant hidden costs, which disproportionately affect the most vulnerable populations within and beyond the borders of the welfare state. This paper outlines a research agenda that draws on Stephan Lessenich's concept of externalization, as detailed in his critical examination of Western prosperity, "Living Well at Others' Expense" (Lessenich, 2019), to analyze how digital transformation in welfare systems can similarly externalize social and economic burdens.

Digital exclusion pertains to the gap between individuals who have the resources and skills to utilize digital technologies effectively and those who lack such access. Research has extensively documented that this form of exclusion limits personal opportunities and has broader societal implications by reinforcing existing social hierarchies and economic disparities (van Dijk 2020, Ragnedda, 2018). Moreover, studies have shown how the shift of welfare services to online platforms can exacerbate these digital disparities, potentially leaving behind segments of the population who lack essential technological resources or digital competencies (Norris 2001, Selwyn 2004). This migration raises significant concerns about the accessibility of vital services and the deepening of societal inequities, highlighting the urgent need for inclusive digital infrastructure and targeted skill development programs. Moreover, an essential aspect to consider is the global impact of digitalization (Ilcus 2018, Mentsiev et al. 2020). The growing demand for digital infrastructure and devices has triggered an escalation in the exploitation of both labor and environmental resources within less economically developed nations (Ndubuisi 2021). This phenomenon aligns with insights from global systems theory, which describes how industrial activities in economically advanced nations often shift environmental and social costs to poorer regions. Research into the production of digital gadgets shows that it involves not only labor but also the extraction of rare earth minerals, often under conditions that violate basic human rights and threaten environmental sustainability (Wallerstein, 1974; Giddens, 1984). Further studies highlight the severe impacts of such practices, demonstrating how they compromise the ecological balance and exploit vulnerable worker populations (Boselie et al. 2021, Jepsen and Drahekoupil 2017). By intertwining the localized effects of digitalization with its broader global consequences, this research proposal aims to provide a comprehensive perspective on the process of digitalization. It endeavors to challenge the prevailing optimistic discourse surrounding the advancement of digital technologies in public services and advocates for a critical reevaluation of the strategies employed in their implementation.

## **Internal Impact on Welfare Societies**

As welfare states increasingly digitalize their services, the promise of improved accessibility and efficiency contrasts sharply with the reality faced by certain demographic groups (Eichhorst and Rinne 2017, Harris 2020). Exacerbation of the digital divide, which manifests in disparities in digital access and literacy, are affecting the equitable distribution of welfare benefits (Van Dijk 2016). The digital divide is primarily characterized by differences in access to digital technologies and the internet, as well as varying levels of digital literacy. Research indicates significant gaps between urban and rural areas, with rural populations often lacking reliable internet services and the infrastructure necessary to support digital platforms. Similarly, disparities exist between different age groups and socioeconomic classes (Frennert 2021, Hardey and Loader 2007). Older adults and lower-income families are less likely to have the digital

literacy skills required to navigate increasingly online-only welfare services (Alexopoulou et al. 2022, Schwennesen 2019).

The consequences of the digital divide and digital inequalities in welfare states are profound. As services from healthcare enrollment to unemployment benefits move online, those without access or necessary skills are disproportionately disadvantaged (Helsper and Reisdorf 2017). This shift can lead to a form of exclusion from essential services, effectively creating a barrier to assistance based on technological proficiency (Svensson and Ranerup 2021, Broomfield and Reutter 2022).

For example, during the COVID-19 pandemic, many governments rapidly expanded digital services to deliver health information and economic support. However, studies showed that marginalized groups, such as the elderly and less educated, faced significant challenges in accessing these services, which compounded their vulnerabilities during the crisis (Seifert et al. 2021).

The digital transformation of welfare societies presents a landscape marked by stark contrasts and divergent approaches. This transformation has been hindered by both a deficit in technological understanding (Pedersen & Wilkinson, 2018; Van Lancker, 2020) and by technological determinism (Colington, 2021, Lofgren & Sorensen, 2011). Additionally, there is a notable gap in research concerning the lived experiences of citizens within welfare states (Livingstone and Helsper 2007; Reisdorf & Rhinesmith 2020, Mervyn et al. 2014) and the experiences of those involved in providing, delivering, and developing digital infrastructure on a global scale. This research proposal aims to broaden the scope of study on the digitalization of welfare states by incorporating an examination of the dynamics of global inequality.

## **Global Impact of Digitalization**

As welfare states advance their digital infrastructure, there is a predominant emphasis on local advancements, often at the expense of neglecting the broader, more extensive global ramifications that such progress may entail. This particular segment undertakes a view of how the momentum towards digital transformation within more affluent nations commonly results in the externalization of costs towards developing countries, consequently impacting various facets of their societal, economic, and environmental framework (Strange and Newton 2006). The intricate web of the global digital economy heavily relies on both natural resources and human capital, the procurement of which frequently occurs under contentious circumstances within less-developed regions (Lazović and Duričković 2014). A prime example of this phenomenon is the extraction of rare earth metals, which are indispensable for the manufacturing of electronic gadgets and serves as a stark illustration of these prevailing patterns. These operational activities not only give rise to apprehensions regarding environmental deterioration but also bring to light the prevalence of substandard working conditions within these

sectors, thus underscoring the pressing need for reforms (Huseynli and Huseynli 2022). Moreover, the factories engaged in the assembly of digital devices have gained notoriety for their labor practices that blatantly contravene international labor norms, with pervasive issues encompassing unjust remuneration and hazardous work environments being alarmingly prevalent (Singh and Zammit 2019). This exploitative paradigm further solidifies a global dichotomy wherein the prosperous societies of the Global North reap the benefits derived from the resources and toil of the less affluent Global South. Consequently, this not only exacerbates existing economic and social cleavages but also perpetuates a cycle of reliance and fragility within these marginalized regions, thereby amplifying their susceptibility to external influences (Helbling and Jungkunz 2020).

### **Externalization of Digital Welfare**

Externalization, as delineated by Stephan Lessenich, refers to the intricate process through which affluent societies offload the social and environmental costs linked to their prosperity onto less privileged groups and regions, thereby perpetuating global inequalities. This particular concept is extensively explored and analyzed within the pages of Lessenich's scholarly work, "Living Well at Others' Expense". The author posits that the very foundation of prosperity in Western societies hinges on the continual relocation of burdens rather than their resolution, thus perpetuating and exacerbating existing global disparities and inequities (Lessenich, 2019).

When delving into the realm of digital welfare states, the notion of externalization becomes even more salient, especially considering the prevalent partnerships between public sectors and major IT corporations that often characterize this domain. These collaborations are commonly lauded for their potential to enhance service delivery by leveraging technological advancements. Nevertheless, they also pose subtle risks of externalizing costs. For example, while digital platforms may indeed enhance the accessibility of welfare services, they also bring about a host of issues such as heightened surveillance measures, apprehensions regarding data privacy, and a reliance on proprietary technologies that may not necessarily align with the broader public interest (Bielefeld et al. 2021). These potential challenges emphasize the critical importance of meticulously evaluating the implementation of digital welfare systems to ensure that they do not inadvertently bolster or worsen existing societal disparities (Mann 2020). By applying the analytical framework of externalization this proposal seeks to conduct a thorough assessment of whether the ongoing digital transformation within welfare states is fostering greater social and economic equity or if it is, in fact, shifting the burdens onto the most vulnerable groups, both at a local and global scale.

## **Proposed Research**

The intended research seeks to meticulously explore the socio-economic and global consequences of digital welfare systems, placing a strong emphasis not only on the internal dynamics within nations but also on their extensive global implications. This investigation will employ the concept of "externalization" as a pivotal analytical tool to comprehend the ongoing and future transformations in digital welfare systems. The initial focal point of this inquiry is the intensification of the digital divide, impacting diverse demographic groups such as the elderly, low-income families, and communities. The methodology will blend quantitative surveys and qualitative interviews to provide a comprehensive understanding of how digital welfare services are accessed and used. Quantitative surveys will measure accessibility and usability, while qualitative interviews will reveal personal experiences, systemic obstacles, and challenges encountered by these populations. Moreover, the research will critically examine the global resource exploitation involved in the production of digital technologies. This examination will encompass the entire supply chain, from the extraction of raw materials to the assembly of electronic devices, assessing labor conditions, environmental impacts, and the economic dependencies created, especially in the Global South. This analysis will underscore how digitalization tends to shift its burdens on two levels. First, locally to citizens in disadvantaged position in the welfare state and second, globally to less developed areas where workers help to deliver crucial infrastructure to western welfare states.

Additionally, the study will assess the effectiveness of current policies governing digital welfare services. A detailed evaluation of existing regulations will identify deficiencies and inefficiencies, leading to the formulation of policy recommendations aimed at promoting fair labor practices, sustainable resource management, and equitable technological access. These recommendations intend to alleviate the negative outcomes identified and suggest strategies to augment the inclusivity and sustainability of digital welfare systems. By exploring these areas, the research will shed light on the intricate interdependencies and challenges presented by the digitalization of welfare services and propose practical solutions. Utilizing the concept of externalization, this study will provide a critical perspective to reassess and improve digital welfare practices, steering them towards a more equitable and sustainable framework. Through this comprehensive analysis, the research will contribute significantly to our understanding of the broader impacts of digital welfare systems and guide future digital transformations in a more conscientious direction.

## **Conclusion**

The drive towards digitalizing welfare systems, though aimed at improving the efficiency and reach of service delivery, uncovers a wide range of both local and global

consequences that are frequently overlooked. These technological shifts not only present significant challenges to the accessibility of welfare services at a local level but also contribute to a broader cycle of exploitation and environmental degradation worldwide. The proposed research highlights the urgent need for a thorough reevaluation of how digital welfare technologies are deployed, advocating for an approach that is more ethically grounded and cognizant of the extensive implications of digitalization.

This study calls for the adoption of strategies that prioritize sustainability, equity, and inclusivity in digital welfare systems. By integrating practices that are environmentally responsible and policies that are equitable, along with technologies that are accessible to all, the research suggests that it is possible to extend the benefits of digital welfare to a broader audience without compromising the welfare of the most vulnerable groups. This approach not only addresses the internal challenges faced within nations but also mitigates the adverse effects of externalization where local costs are shifted to the global stage, often impacting those least able to bear them. Through a comprehensive analysis of both the socio-economic and environmental impacts of digital welfare systems, this research intends to offer actionable insights that could guide policymakers and stakeholders in reforming digital welfare practices. By emphasizing the concept of externalization, the study aims to provide a critical lens through which the broader impacts of digital transformations in welfare can be understood and addressed.

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