Araştırma Makalesi

IS THE DIGITALISATION OF WELFARE CREATING NEW SOCIAL RISKS? THE CASES OF THE UK, FINLAND AND SWEDEN

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Abstract

Existing social policy literature does not adequately explain how welfare states are changing today in the digital age. However, we are witnessing how digitalisation is fundamentally shifting the policy paradigms of welfare states in today's living conditions. The transition to data-driven systems, especially in public administration, has been one of the important agenda items of many countries for some time. Such a landscape has provided a suitable ground for discussing some opportunities and challenges for traditional welfare states. The main theme of these debates is centred around the question "are traditional welfare states transforming?". This article traces the course of digitalisation in social policy and analyses the opportunities and challenges faced by countries implementing digital social policy today in a descriptive manner. The article is organised in three main parts. In the first part, the digital welfare state is conceptually analysed by discussing the course of digitalisation in social policy and the turning points on the road to digitalisation. In the second part, the opportunities, risks and dilemmas of the digital welfare state are discussed. In the last section, the digital welfare state practices of the UK, Finland and Sweden are analysed. The findings of the research indicate that digital welfare systems bring serious dilemmas and risks as well as advantages. The research shows that digital welfare systems tend to create "new social risks".

Key Words: *Social Policy, Digital Welfare, Welfare State, Digital Inequality.*

JEL Codes: I3, I30, I38,

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Refahın Dijitalleşmesi Yeni Sosyal Riskleri mi Ortaya Çıkarıyor? İngiltere, Finlandiya ve İsveç Örnekleri

Öz:

Mevcut sosyal politika literatürü, refah devletlerinin dijital çağda bugün nasıl değiştiğini yeterince açıklamıyor. Ancak günümüz yaşam koşullarında dijitalleşmenin refah devletlerinin politika paradigmalarını nasıl temelden değiştirdiğine tanık oluyoruz. Özellikle kamu yönetiminde veri odaklı sistemlere geçiş, bir süredir birçok ülkenin önemli gündem maddelerinden biri. Böyle bir manzara, geleneksel refah devletlerine yönelik bazı fırsatların ve zorlukların tartışılması için uygun bir zemin hazırlamıştır. Bu tartışmaların ana teması "geleneksel refah devletleri dönüşüyor mu?" sorusu etrafında yoğunlaşıyor. Bu makale, sosyal politikada dijitalleşmenin seyrini takip etmekte ve günümüzde dijital sosyal politikayı uygulayan ülkelerin karşılaştığı fırsatları ve zorlukları betimsel bir şekilde analiz etmektedir. Makale üç ana bölüm halinde düzenlenmiştir. İlk bölümde sosyal politikada dijitalleşmenin seyri ve dijitalleşme yolundaki dönüm noktaları tartışılarak dijital refah devleti kavramsal olarak analiz ediliyor. İkinci bölümde dijital refah devletinin fırsatları, riskleri ve ikilemleri tartışılıyor. Son bölümde ise İngiltere, Finlandiya ve İsveç'in dijital refah devleti uygulamaları analiz edilmektedir. Araştırmanın bulguları, dijital refah sistemlerinin avantajların yanı sıra ciddi ikilemleri ve riskleri de beraberinde getirdiğini göstermektedir. Araştırma, dijital refah sistemlerinin "yeni sosyal riskler" yaratma eğiliminde olduğunu gösteriyor.

Anahtar Kelimeler: *Sosyal Politika, Dijital Refah, Refah Devleti, Dijital Eşitsizlik.*
JEL Codları: I3, I30, I38,

Introduction

Existing social policy literature does not adequately explain how welfare states are changing today in the digital age. However, we are witnessing how digitalisation is fundamentally shifting the policy paradigms of welfare states in today's living conditions. Although the digitalisation of the welfare state has recently been a topic of interest in the international academic literature, these studies lack theoretical reflections and perspectives on digital welfare states. Researchers studying social policy find it challenging to determine what constitutes a digital welfare state and how far welfare states have advanced toward a fundamentally different condition of existence as a result of this neglect. However, the modernization of welfare states has included utilization of a significant amount of digitalization and information and communication technology for many years. For instance, welfare and population management in the Nordic nations are largely based on administrative databases that are standardized in accordance with citizens' needs, allowing for the determination of the merit and equitable distribution of public resources (Dencik and Kaun, 2020, p. 2; Larsson and Haldar, 2021). Moreover, the early 21st century has seen the implementation of digitised welfare (welfare policy delivered through technological means) in many countries, notably the UK and the US, and other countries, such as Australia, have also launched digital welfare policy initiatives. Digitalised welfare is typically only part of a broader welfare reform programme (Coles-Kemp et al., 2020). In this context, Crato and Paruolo (2019) emphasise that national registries (and/or data) are crucial for "evidence-based policy" in the evaluation of public policy and interventions in the public administration and social policy research tradition.

Digitalization's triggering of total social change, the change of new forms of production and consumption, the structural transformation of demography, uncertainties about the future, and the inadequacy of social policy instruments in many countries during the Covid-19 pandemic have brought traditional welfare models into discussion again. Governments are attempting to harness technology advancements to boost their productivity as a result of the increased digitalization of information. As a result, the majority of western nations have progressively embraced the idea of "digitalization" to simplify and rationalize their public administrations. As a result, in recent years, the usage of digital technology in public administration has greatly increased. While some nations have conducted reform attempts and approved new policy measures in this context, a more thorough discussion on how the welfare state could be

changed and a more comprehensive rethinking of its social fabric are still required (Hemerijck, 2017).

The article is organised in three main parts. In the first part, the digital welfare state is conceptually analysed by discussing the course of digitalisation in social policy and the turning points on the road to digitalisation. In the second part, the opportunities, risks and dilemmas of the digital welfare state are discussed. In the last section, the digital welfare state practices of the UK, Finland and Sweden are analysed. The main purpose of selecting these countries is that they reflect each model that Esping-Andersen (1990) divided into three in his classification of welfare states according to their degree of decomodification. In this context, the UK is a liberal welfare state, Finland is a conservative welfare state and finally Sweden is an example of a social democratic welfare state model.

Footsteps of Digitalisation in Social Policy and the Concept of Digital Welfare State

The welfare state is widely acknowledged as a vital institution within modern societies, with the primary objective of ensuring a reasonably satisfactory standard of living for its populace. A welfare state can be broadly characterized as a governance paradigm wherein the government assumes the primary role in ensuring the provision of comprehensive welfare services to its populace. According to Therborn's (1984) classical definition, welfare states can be understood as state-driven institutions that aim to address the welfare requirements of households. According to Offe (1984), classical studies claim that welfare states encompass a clear responsibility of the government to provide assistance to individuals with distinct needs and vulnerabilities. The term "welfare state" was initially employed in the Beveridge Report 1942. The initial foundations of social protection in Western Europe were established throughout the latter part of the 19th century. The emergence of the modern welfare state, as it is currently conceptualized, may be traced back to the early 1940s, with significant development occurring in the post-war era, roughly spanning from 1950 to 1970. During the late 19th century and early 20th century, national governments progressively expanded their social protection and social responsibilities to encompass a broader scope of hazards and services. It is therefore necessary to point to a number of turning points in the emergence of the welfare state. Undoubtedly, it is possible to trace the period 1880 and before back to "The Poor Law Act" that came into force in England in 1601. Subsequently, the Gilbert's Act of 1782, which stipulated the provision of financial assistance to all poor individuals, is also

mentioned in the literature as the pioneering practices of the social welfare state steps (Esping-Andersen and Korpi, 1986).

While there is still no clear consensus in the literature on the origin of the welfare state, it can be stated that the general opinion is the regulation of working hours and working conditions in factories in England. On the other hand, while defining the welfare state, it should not be overlooked that one of the leading countries is Germany. The social security regulations prepared by the German chancellor Otto Von Bismarck in 1871 is another milestone of the welfare state (Arıcı, 1999, p. 235). However, social welfare reforms decreased significantly with the World War I. Due to the increase in public expenditures as a result of the destruction caused by the war, it was seen that the state could not struggle in many areas, especially in areas such as health, housing, pensions, rehabilitation and housing (Tuz, 2010, p.39). After the First World War, the global crisis, which started on the day called "Black Thursday" in the USA, affected the whole world (Galbraith, 1954, p.114). The economic depression that started in 1929 and lasted for many years interrupted the welfare state practices at the beginning, but it started to mature over time (Gümüş, 2019, p.37).

1945-1970s are known as the "Golden Age" of the welfare state. During this period, states (USA, Canada, France, Germany, Italy, Japan and UK) significantly increased their social expenditures, social rights were expanded and the welfare state concept gained an institutional structure (Gökbunar et al., 2018). Nevertheless, the advent of financial globalisation in the 1970s presented a formidable obstacle to the welfare state, as Esping-Andersen (1990) noted. According to Greener (2022), the advent of globalization has led to a significant transformation of post-war welfare states, resulting in the emergence of increasingly unequal societies.

In the latter part of 1970, a shift in the conceptual underpinnings of the welfare state commenced. The primary factors contributing to this transformation encompass the disintegration of the socialist alternative, the ascendancy of the liberal perspective, the globalization of the economy, and ultimately, the erosion of the nation-state paradigm (Özdemir, 2009, p.62). The personalization of social risk has been accompanied by the transformation of traditional forms of work, such as part-time or fixed-term contracts, into non-standardized forms due to the liberalization of the labor market (Taylor-Gooby, 2004). Consequently, certain nations have implemented a labor market division whereby individuals actively participating in the labor market are granted complete access to social benefits

contingent upon their full-time job status, while those who are not engaged in the labor market are excluded from such entitlements. Insecurity in the labour market and family structures has transformed the nature of social risks into "new social risks" (Bonoli, 2007). According to Beck (1992), the aforementioned changes might be characterized as the emergence of a "risk society," wherein individuals generate novel social dangers that surpass their capacity to control and are considerably more intricate compared to earlier epochs. According to Choi et al. (2022), contemporary social risks encompass several factors such as single motherhood, insufficient or obsolete skills, and inadequate social security institutions. In light of emerging societal hazards, welfare states have undertaken significant reforms to their welfare policies with the aim of enhancing the employability of individuals. These reforms involve the provision of social services that specifically cater to the needs of dual-income families, while operating within the framework of active labor market policies. Simultaneously, the phenomenon of demographic ageing has led to an escalation in traditional social risks, such as those related to pensions, health, and poverty. Additionally, emerging social hazards have emerged, compounding the overall social risk faced by individuals (Larasati, 2022). Gulliver et al. (2021) claim that the emergence of ancient social risks can be attributed to the process of industrialisation, while new social risks arise from demographic challenges. Furthermore, contemporary social hazards are primarily associated with the phenomenon of digitalisation.

The examination of the economic recession experienced during the 1970s, subsequent rise of neoliberalism and globalization as prevailing ideologies in the Western hemisphere, holds significance in assessing the evolution of the welfare state. The changing dynamics have been significantly influenced by the emergence of information and communication technologies (ICT). The emergence of large data collection, automation, and artificial intelligence has prompted more scrutiny of the welfare state (Petropoulos et al., 2019). The establishment of databases and the surveillance of individuals has constituted a pivotal aspect of the welfare state since its inception, serving as a crucial mechanism for evaluating societal requirements and determining the distribution of resources (Rule, 1973; Scott, 1994). The aforementioned system plays a significant role in promoting social engineering and discerning between individuals deemed "deserving" and "undeserving" under the fundamental characteristics of the contemporary welfare state (Dencik and Kaun, 2020). According to Pasi and Misuraca (2020, p.165), digital challenges traditional welfare states.

One of the important areas affected by the digitalisation of welfare is the labour market. The inadequacy of the inclusiveness of the Bismarch and Beveridge models in terms of welfare state financing is discussed due to the changing labour market structure with digitalisationIn the realm of welfare state finance, Europe has historically established two primary approaches. One perspective to consider is the Bismarck model, which offers security and benefits to individuals who pay to its funding through job contributions (Titmuss, 1975). In contrast, the Beveridgean model, as elucidated by Clasen and Clegg (2011), is funded through tax revenues collected by the government and provides coverage to the entire populace. The existing body of literature indicates that contemporary welfare states exhibit a combination of both divergent and convergent characteristics. This trend towards convergence is particularly notable in light of the ongoing process of European integration (Clasen and Clegg, 2011). The digital transformation has led to and intensified the emergence of flexible work arrangements, skills obsolescence, and fragmented career trajectories. These aspects necessitate a paradigm shift in the operation of the labor market and bring about a fundamental transformation in its essence (Gonzalez Vazquez et al., 2019). In the existing and future societies, the efficacy of welfare state finance mechanisms, such as the Bismarck model that relies on social insurance contributions, is compromised and unable to adequately sustain the operations of welfare states. Furthermore, it is evident that labor marketplaces are seeing a growing polarization, as technological advancements are gradually supplanting numerous middle-skilled occupations with both high-skilled and low-skilled alternatives. Consequently, the reduction in the proportionate quantity of occupations requiring intermediate-level skills frequently results in the deterioration of the socioeconomic group known as the middle class (OECD, 2019). In this context, as in the Beveridgean model, a welfare state financing mechanism based on general tax revenues will face significant backlash if the main tax revenue base is eroded or "compressed". Thus, the digital transformation affecting labor markets and the middle class is a key force that puts more pressure and heavily opposes the soundness of the financial foundations of welfare systems.

In the light of all these reasons, the "digital welfare state", which is coming to light, can be explained with various definitions. According to Larasati et al. (2022), “the digital welfare state is a system that provides welfare services by the state based on the use of technology and data”. According to Alston (2019, p.1), “digital welfare states can be defined as a phenomenon wherein social protection and support systems are progressively influenced by digital data and

technologies, which are utilized for purposes such as automation, prediction, identification, surveillance, detection, targeting, and punishment." Moreover, the digital welfare state leverages data that has been digitized by both public and commercial entities, afterwards subjecting it to algorithmic and artificial intelligence analysis. This process enables the development of policies pertaining to social services that are not only effective but also efficient. The primary objective of implementing the digital welfare state is to achieve alignment between the intended beneficiaries of social assistance services and the government's efforts in redistributing social welfare.

Jorgensen (2021) outlines a three-stage process for the provision of social assistance within the context of the digital welfare state. The process of digitalization commences by transforming analogue data into digital format, encompassing many types of information such as people' national identity data, education data, health data, employment data, and other relevant datasets. Typically, the acquisition of data utilized by the government for the purpose of welfare service provision involves the exchange, purchase, and sale of data between the public sector and commercial entities (Jorgensen, 2021). After the acquisition of data, the subsequent stage involves the process of digitisation. Within the contemporary framework of the prevailing inclination towards digitalized welfare state services, this particular measure can be comprehensively delineated as the extensive utilization of digital technology to facilitate and mechanize the procedures involved in welfare decision-making (van Lancker & van Hoyweghen, 2021). During the process of digitalisation, the utilization of technology and digitized data can be employed to allocate welfare services to beneficiaries based on their unique features and requirements, similar to the approach taken in healthcare intervention targeting (Verhoef et al., 2021). This concept aligns with the underlying principles of digital transformation, which seeks to enhance service quality by leveraging data obtained from the digital ecosystem. Additionally, it intends to deliver suitable welfare services to citizens, with a particular focus on marginalized populations.

According to Larsson (2019), the concepts of digitalisation and digital transformation hold significant value in elucidating the various alterations and ramifications brought about by digital technology throughout societal domains. In essence, intelligent algorithms play a pivotal role in enhancing the efficiency of everyday tasks, often rendering it difficult to conceive of their absence and the subsequent challenges that would ensue in their absence. Currently, there is a significant and accelerating adoption of artificial intelligence and robots.

In pursuit of this objective, the concept of digitizing welfare and the public sector is regarded as a means to offer a more streamlined and economically advantageous approach to address the escalating needs of the populace. The public sector faces significant pressures due to societal concerns, including the expansion and aging of the population, the increasing prevalence of chronic diseases, and ongoing economic restrictions. Consequently, there is a need to explore innovative approaches to delivering public services while maintaining cost-effectiveness. The contention posits that the integration of technology within welfare services can contribute to the sustained economic stability of the welfare state. Also, another possibility provided by digital well-being is that the public sector will become more interconnected. Sharing information across the public sector is essential to shorten lead times, ensure transparency, and ensure the right care is delivered to the right citizen (Larsson, 2019).

Opportunities, Risks and Dilemmas of the Digital Welfare State

The utilization of digital technology in the public sector is now in its nascent stages. Hence, a state of ambiguity persists in nations over the appropriate methods for gathering and utilizing personal data. While several governments, like the United Kingdom, exhibit a stronger inclination towards utilizing data in decision-making processes, there remains a lack of consensus over the optimal utilization of data. The presence of an interpretative gap arises from the inherent challenge of effectively elucidating the specific domains and methodologies in which data-driven systems are employed. Consequently, the adoption of these technologies has engendered a multitude of discussions and controversies, as evidenced by the scholarly work of Dencik et al. (2019). Undoubtedly, the extensive body of worldwide literature serves as the most compelling evidence in support of this claim. The absence of a consensus among scholarly authors regarding the advantages, drawbacks, and ethical quandaries associated with the digital welfare state accounts for this situation. Hence, this component of the research incorporates critiques pertaining to the activities of the "digital welfare state". The issue of the potential emergence of new disparities within the digital welfare state, commonly referred to as digital inequality, digital divide, or digital poverty, is a topic of significant scholarly discourse.

According to Günther et al. (2017), the utilization of big data in the business sector facilitates growth and enhances competitive advantage. Furthermore, the authors assert that big data can provide substantial value in diverse social policy domains. The integration of big data into healthcare processes has been demonstrated to facilitate patient-centered services, early

detection of disease spread, monitoring of hospital quality, and enhancement of treatment methods (Archenaa and Anita, 2015). This is achieved through the implementation of e-health integrated platforms (Black et al., 2014). Furthermore, the utilization of Information and Communication Technologies (ICTs) fosters enhanced accountability and transparency, hence bolstering the democratic legitimacy of welfare systems through the establishment of more intimate and reliable connections with citizens (Pasi and Misuraca, 2020). In contrast, Mergel et al. (2019) underscore the significance of cultural shifts, organizational changes, and alterations in relationship dynamics that accompany the process of digital transformation. According to Mergel et al (2019), this transformation is evidenced by the changing interaction between citizens and authorities. Citizens will be asked to upload the necessary documents to the welfare management systems to be processed with technology in order to determine their right to access social services. Thus, the digital transformation in welfare services will erode the direct interaction between citizens and social workers through technology.

The rise of new social dangers poses a significant issue within the context of the digital welfare state (Choi et al., 2022). Gough (2013, 2016) has recognized climate change, Covid-19, and digital concerns as emerging social risks. The present hazards coexist within a shared domain alongside preexisting and emerging risks, hence engendering a multitude of uncertainty for individuals. The concept of "old risk" encompasses longstanding issues of inequity, including but not limited to poverty, limited access to education, inadequate healthcare facilities, and a dearth of human capital. The digital age has introduced a novel sort of social risk associated with the application of welfare, distinct from traditional social concerns. One of the most significant factors in this context stems from the availability of data. The enhanced availability of data to governmental entities for the purpose of monitoring and forecasting individuals' conduct might give rise to potential hazards, including the potential for discrimination or stigmatization. The aforementioned power imbalance might be interpreted as a novel form of colonialism, referred to as data colonialism, when individuals are subjected to normalization through the utilization of their data for the advantage of those who possess and control the data (Couldry and Mejias, 2018; Varon and Pena, 2021). Technological advancements can have a transformative impact on governance, leading to consequential shifts in policy results. Digitalization has the potential to marginalize individuals through the utilization of undisclosed factors in automated decision-making systems, hence exacerbating disparities in access, utilization, and advantages associated with digital technology (van Dijk, 2008; Schou

and Pors, 2019; Helsper, 2021). Digitalisation can lead to significant digital challenges for the welfare state. These challenges, e.g. the need to develop the individual skills and abilities required by future jobs with digitalisation, may result in new social inequalities and digital divide in the welfare state (Buhr et al., 2017, p.4). Various studies show that digital technologies also have the potential to (re)produce and reinforce social disadvantage. People who are already disadvantaged may be further excluded from full participation in society with digital technologies (Notley and Foth, 2008; Kim et al., 2009). This situation brings digital inequalities to the agenda.

The most important risk that the digital welfare state may create in the labour market is the increase in technological unemployment. The literature emphasises that the disappearance of routine tasks with technological transformation may bring higher risks among low-skilled people (Eichhorst and Rinne, 2017; Thewissen and Rueda, 2019; Lim, 2020). Although new estimates no longer suggest the concept of a "end of work" or complete replacement of humans by machines (Frey and Osborne, 2017), they do acknowledge that digitalization is leading to the creative destruction of jobs and will significantly alter the fundamental characteristics of labor. It is anticipated that the aforementioned issues would necessitate the implementation of more efficient public policy measures in the domains of education and training policy, as well as social protection and care policies (Greve, 2019; Palier, 2019; Dermont and Weisstanner, 2020; Valenduc and Vendramin, 2017, p.132). According to Degryse (2016), certain experts argue that the existence of digital labor markets poses a threat to the overall efficacy of welfare states and labor markets.

There are several examples of inequalities and problems experienced in countries within the scope of digital welfare practices. One of them originated from the social assistance system (SyRI) in the Netherlands (Bekker, 2021). More than 10 thousand families receiving childcare assistance in the Netherlands were accused of being "cheaters" by state officials. The court found that the problem stemmed from the digital surveillance system of social benefits and ordered this practice to be stopped as soon as possible. The Dutch government resigned following this accusation. Reactions have generally been that such "digital welfare states", developed without consultation and run in secret, spy on the poor, violate norms of privacy and human rights, and unfairly punish the most vulnerable (Henley and Booth, 2020).

The current discourse around digital social policy mostly centers on the examination of legal, ethical, political, and power-related concerns. Additional prominent illustrations that might

be provided in this context are as follows: The algorithm implemented by OfQual in the United Kingdom in 2020 (Kelly, 2021), Australia's Online Compliance Intervention (OCI) system, commonly known as 'robodebt' (Carney, 2019; Mann, 2020), the utilization of COMPAS in parole and sentencing decisions within the criminal justice systems of the United States (Kehl and Kessler, 2017; Hannah-Moffat, 2019; Hartmann and Wenzelburger, 2021), Alleghany County's Family Screening (Vaithianathan et al, 2017), China's social credit system (Dai, 2018), and the Electronic Visit Verification (EVV) system employed by the United States Medicaid for caregivers of individuals with disabilities (Mateescu, 2021). Conversely, a significant number of impoverished households in India were deprived of access to food handouts due to their inability to meet the prerequisites of digital identification. According to Toh (2019), the substitution of case workers with automated systems for the purpose of processing social assistance claims by municipal governments in the United States and Canada resulted in an escalation of underpayments and benefit denials. All these examples have emerged as a result of integrating digitalization into social policy practices. Therefore, one of the biggest impasses of the digital welfare state stems from the fact that the ethical and legal infrastructure of most of the beneficiary countries has not yet been adequately developed.

Digital Welfare State Reflections from the UK, Finland and Sweden

United Kingdom

The United Kingdom is widely regarded as a suitable illustration of significant patterns that arise from the convergence of technical infrastructures and the welfare state. In the United Kingdom, there was a notable rise in the proportion of houses equipped with home internet connectivity, with an increase from 76% to 89% seen during the period spanning from 2011 to 2020. This suggests that before the pandemic (March 2020), 11 per cent of UK households remain digitally excluded from home internet access. Ofcom's latest data shows that the number of households without home internet access is now 6 per cent (Ofcom, 2022). However, the 'digital divide' is still a growing concern in the UK, where access to technology and the internet remains unequal across the country. This inequality affects individuals, communities and businesses, leading to unequal growth and opportunity. There are also large inequalities in digital connectivity and broadband infrastructure between regions. For example, 30 per cent of rural commercial premises and 17 per cent of rural residential properties do not have superfast broadband of 30 Mbit/s or more. Fibre networks are critical

to bridging the digital divide in the UK. For this reason, the UK has been trying to close the digital divide with investments in fibre infrastructure in recent years (STL, 2023).

In the UK, digital connectivity is not a luxury but a daily necessity, as every aspect of life, from job search to healthcare, has moved to the internet. Against the backdrop of the worst cost of living crisis in the UK for forty years, a new concern, now known as digital poverty, has been added to the debate about fuel and food poverty. Data from a survey of low-income households reveals the extent of digital poverty in the UK. It also shows that existing fixes, including social tariffs targeted at the poorest in society, are not effectively addressing this critical issue (IDS, 2022).

In his investigation of the UK in 2018, Philip Alston, the UN Special Rapporteur on extreme poverty and human rights, emphasized the significant role that digital technology currently assume in the administration of welfare (Alston, 2019). According to Toh (2019), the report conducted by Professor Philip Alston in 2019 cautions about the gradual erosion of the British welfare state, which is being overshadowed by the prevalence of digital platforms and automated decision-making systems. The Universal Credit System holds significant significance since it is widely recognized as the inaugural digital policy introduced by the UK government. Its primary objective is to streamline and restructure the provision of social welfare benefits to claimants through the implementation of a unified and integrated platform. The "Universal Credit System" was implemented by the government in 2012, offering a consolidated monthly payment for six social security benefits (Toh, 2019). One crucial aspect of this reform is to the prioritization of automation as a policy goal, alongside the utilization of entirely digital methods for claims processing (Dencik, 2022). According to the Department for Work and Pensions, which is responsible for the administration of the Universal Credit System, the implementation of online delivery of benefits is expected to enhance accessibility and cost-efficiency. In practical implementation, the introduction of Universal Credit exposes a discrepancy between the government's digital ambitions and the protection of certain marginalized individuals inside the nation. According to Toh (2019), the United Nations report revealed that those who lack proficiency in digital literacy or face financial constraints in accessing the internet encounter challenges in exercising their rights through online platforms. According to Alston's research, the aforementioned circumstances have resulted in the perpetuation of injustice, marginalization, and a dearth of avenues for seeking remedy. The aforementioned situation has resulted in significant ramifications for human and social rights,

namely pertaining to the entitlement of social protection. The presence of digital divides, encompassing both access and literacy, together with issues such as inadequate design and a lack of transparency, have contributed to the impoverishment of individuals. These factors indicate a deliberate incorporation of conditional requirements within the framework of welfare provision (Dencik, 2022).

Another example of an application is the study conducted by the "Data Justice Lab." This study involves the implementation of citizenship scoring. Citizenship scoring pertains to the utilization of data analytics within the governmental context for the purposes of categorization, evaluation, and prognostication at both the individual and societal levels (Dencik et al., 2019). These practices are part of a broader trend towards data-driven organizations that allegedly operate efficiently and, more importantly, without human bias and error. For municipalities and local authorities facing significant cuts, it is particularly attractive to promote data-driven systems as a way to reduce costs and increase efficiency and effectiveness (Beer, 2019).

The Department of Health and Social Care in England has designated the digital transformation of healthcare as the foremost goal for the national health system, commonly known as the NHS. The establishment of appropriate digital infrastructure is crucial for ensuring the enduring viability of health and social care in England. Nevertheless, it is imperative for the government to assume a significant part in tackling the underlying factors that contribute to individuals' exclusion from or voluntary disengagement with digital services. These factors include challenges related to technological accessibility, proficiency in digital abilities, self-assurance in utilizing digital services, and the inclination to engage with them. Individuals who are marginalized from accessing health services through digital means are also more prone to experiencing frequent instances of digital exclusion. Consequently, the government intends to uphold a comprehensive approach by offering both digital and non-digital services in order to ensure that individuals are not deprived of their right health services (NHS, 2023).

The UK stands out with The Universal Credit System, Data Justice Lab and digital health applications. The UK advocates the encouragement of the development of data-driven public service delivery, while digital health applications are still being discussed for the access of vulnerable groups.

Finland

According to the Digital Economy and Society Index (DESI) 2022 study, Finland achieved the top ranking among the 27 member states of the European Union. Furthermore, it is worth noting that Finland has successfully achieved the Digital Decade objective of ensuring that 80 percent of its population possesses a minimum level of digital proficiency, as reported by DESI (2022a). According to DESI (2022a), Finland is in a favorable position to achieve the goal of digitizing all essential public services and surpass the Digital Decade target for 2030 ahead of the projected timeframe.

The year 2017 witnessed the initiation of the AuroraAI initiative by Finland, which serves as a comprehensive national strategy in the field of artificial intelligence (AI). The primary objective of this program is to enhance the quality of public services and bolster the competitive edge of the nation. The primary objective of AuroraAI is to enhance the facilitation of contact and data exchange among various services and platforms by consolidating all public institutions inside a unified network. As stated in the national AI plan, Finland is well-positioned to develop top-tier services in the era of artificial intelligence (Ministry of Economic Affairs and Employment, Finland, 2017, p.14). The objectives of AuroraAI are to optimize the functioning of daily life by facilitating seamless integration of various services, mitigating the existence of isolated sectors within the service industry, and fostering economic efficiency. Finland is actively striving to become a frontrunner in the field of digitalization, as stated by the Ministry of Economic Affairs and Employment (2021).

Governments are expeditiously implementing the digitalisation of public services with the aim of enhancing the cost-efficiency of the public sector. The digitalization of public service delivery is perceived by Western countries as a strategy to address the issue of reducing the scale of the public sector and enhancing cost-effectiveness (Schou and Hjelholt, 2018, 2019; Tangi et al., 2021). According to Pissin (2020), policy makers argue that prioritizing citizens as the focal point of services is the primary means of achieving effective digitalisation.

Finland has initiated the implementation of extensive digitalization initiatives aimed at revolutionizing public health and social welfare services, namely. Initially, the Finnish Social Insurance Institution (Kela) implemented a digitalisation process for the submission of applications pertaining to fundamental social benefits. The aforementioned provisions encompass fundamental social safeguards, such as child benefit, income assistance, basic pension, basic unemployment insurance, housing benefit, disability benefit, and rehabilitation support. In Kela's procedures, innovation is regarded as a strategic domain. One of the

objectives is to identify strategies for minimizing the necessity of customers reaching out to customer service. Kela possesses a substantial volume of data pertaining to its clientele, which is in line with the customary practice observed by social security organizations. The population of Finland is estimated to be over 5.5 million individuals, whereas Kela's electronic services recorded roughly 64.4 million instances of user logins in the year 2020 (Kela, 2020).

The subsequent initiative is referred to as the My Kanta portal. The present platform serves as a digital rendition of individuals' personal health records and medication prescriptions. Furthermore, several municipalities have implemented digital appointment booking systems, service chats, and remote consultation services via this platform (Buchert, 2022). In recent years, there has been a significant surge in the adoption and utilization of electronic health records (EHRs) within the healthcare system of Finland (Wildenbos et al., 2018). Electronic Health Records (EHRs) have been identified as a significant information and communication technology (ICT)-driven solution within the healthcare industry (Comandé, 2015, p.195).

Heponiemi et al. (2021) examined how online public services in Finland are perceived by adults. The research results show that those with mostly offline resources make less use of online services. Therefore, it is important to improve internet infrastructures and develop digital skills policies so that digital well-being practices can be adopted by everyone.

Sweden

According to the Digital Economy and Society Index (DESI) 2022 report, Sweden is positioned as the fourth highest-ranking country out of the 27 member states in the European Union. Sweden has demonstrated commendable performance in this particular domain, particularly in recent times. In this particular procedure, despite a decrease in pace compared to previous periods, it consistently maintains a performance level that surpasses the average observed across the European Union. Sweden is making progress in its efforts to reach the Digital Decade goal of ensuring that 80 percent of the population possesses fundamental digital skills (DESI, 2022b).

The Swedish government has established a comprehensive plan to assume a leadership role in the global expansion of digitisation within the public sector. In the year 2016, an agreement was reached between the government and the Swedish Association of Local Authorities and Regions (SALAR) regarding a collective vision known as Vision e-Health 2025. This vision

aims to position Sweden as the leading nation in harnessing digitalization in the domains of health and social services by the year 2025 (Germundsson, 2022).

Sweden's telemedicine service, often known as e-health, is notable within the realm of digital welfare applications. Through the utilization of smartphone applications, patients are able to engage in direct video communication with healthcare professionals by simply pressing a button. This eliminates the need for patients to endure prolonged waiting periods, spanning days or even weeks, for non-urgent consultations at physical healthcare facilities. Furthermore, apart from the reduction in waiting times, this advancement has several additional advantages, including the elimination of the inconvenience associated with patient travel and the mitigation of transmission risks within care facilities (Mohr et al., 2018). Nevertheless, this method also entails certain limitations. According to Blix and Jeansson (2018), the provision of substantial governmental subsidies for primary care appointments, along with notable enhancements in accessibility, may lead to an escalation in costs that is not financially viable for taxpayers. Furthermore, it is noteworthy that the most severe criticisms of telemedicine originate from within the medical field. The critique of telemedicine in Sweden can be succinctly outlined through three key points, as identified by Andersson et al. (2017) (i) A diagnosis cannot be accurately determined solely through a video call; a physical examination is necessary for an accurate assessment. (ii) Online doctors have a tendency to prescribe drugs excessively, particularly antibiotics. (iii) This leads to the promotion of excessive utilization of healthcare services, resulting in a significant number of unnecessary or unwarranted virtual visits, which may detract from the care provided to patients with more complex medical requirements.

Another digital welfare program that is available in Sweden is known as PSS (Personal Social Services). In the context of the Swedish Public Service Sector (PSS), the utilization of automated decision support systems has predominantly revolved around the application of Robot Process Automation (RPA) in outreach activities. Consequently, academic investigations have primarily concentrated on this particular area. Social assistance (SA), commonly known as the final social safety net under the Swedish welfare model, is administered locally by the municipal personal social services (PSS). The primary regulatory framework for the Personal Support Services (PSS) is the Social Services Act. This legislation is intended to grant towns a significant level of autonomy in terms of establishing their PSS and determining the procedures used for income assessment (Hussénius, 2019). Consequently, the evaluation of an individual client's appropriateness for SA is influenced by both city

policies and the local organizational structure and culture (Stranz et al., 2017). In recent times, there has been the emergence of a digitally automated decision support system known as Robot Process Automation (RPA). This system has been designed with the objective of enhancing the efficiency, transparency, fairness, and professionalism of SA evaluations within the administrative framework of Personal Social Services (PSS). Has emerged as a tool. RPA is occasionally denoted as a form of "limited artificial intelligence" (Ranerup and Henriksen, 2020). Robot Process Automation (RPA) is a technology that operates in conjunction with rule-based software, as described by Lindgren et al. (2019). This software is specifically designed to execute repeated operations within or across established digital interfaces. Although the utilization of Robotic Process Automation (RPA) in Swedish Public Service Sectors (PSS) remains somewhat constrained, its implementation and possible ramifications have generated intense public discourse. One of the primary concerns pertains to the legality of granting automated systems the authority to function autonomously as official decision-makers. Furthermore, critics highlight the occurrence of data breaches within public organizations, the inadequately trained algorithms, and instances where citizen support is unjustly denied. The issue of making the personal data of residents accessible to the public is subject to ongoing debate.

Swedish digital welfare state practices are manifested in the field of health and social services. As in other countries, Sweden's digital health applications have caused hesitations in terms of the inclusiveness of accessibility. In addition, the effectiveness of e-health applications is also discussed. In terms of social assistance applications, concerns that citizens may be unfairly rejected due to inadequately trained algorithms lead to various ethical debates.

Conclusion and Recommendations

The phrase "digital transformation" holds significant utility and importance in elucidating the various changes and profound influence brought about by digital technology inside society. In essence, intelligent algorithms facilitate the completion of our routine activities, rendering them more convenient, and in numerous instances, it becomes very challenging to conceive of how we might navigate these chores in their absence. In pursuit of this objective, the concept of digitizing welfare and the public sector is regarded as a means to offer a more streamlined and economically viable approach to address the continuously escalating needs of the populace. The public sector is facing significant pressure to develop innovative approaches for delivering public services at reduced prices due to various societal concerns, including an

expanding and aging population, the increasing prevalence of chronic diseases, and persistent financial restrictions. The primary justification is in the utilization of technology within welfare services, since it enables the welfare state to safeguard its ongoing economic stability. Also, another advantage of digital well-being is that the public sector becomes more interconnected. Thus, it is stated that information sharing across the public sector is essential to ensure transparency and ensure that the right citizen is given the right care. However, current practices and research show that digital welfare systems bring serious dilemmas, risks, and advantages.

As a result of the research, it has been seen that digital welfare systems tend to create "new social risks". Emerging societal perils encompass climate change, the Covid-19, and digital hazards. The present-day social hazards are situated within a shared domain encompassing both traditional and emerging risks, hence engendering several uncertainties for individuals. Multiple research findings indicate that digital technologies possess the capacity to both regenerate and strengthen socioeconomic disadvantage. Individuals who are already experiencing disadvantages within the prevailing circumstances may encounter additional barriers that impede their complete engagement in society due to the presence of digital technologies. In the context of the digital age, vulnerable populations can be understood as encompassing not only people lacking access to essential welfare services such as education, health, and employment, but also individuals who lack internet connectivity and proficiency in digital technologies. Conversely, the implementation of digital transformation in welfare services is anticipated to diminish the extent of face-to-face engagement between citizens and social workers, as technology assumes a more prominent role. The most important risk that the digital welfare state may pose in the labor market is the increase in technological unemployment. As a matter of fact, the literature emphasizes that the disappearance of routine tasks with technological transformation may bring higher risks among low-skilled people.

The debates about the digital welfare state basically draw attention to legal, ethical, political and power issues. The most important problem that arises as a result of integrating digitalization into social policy practices and has been proven by various countries is ethical violations during the sharing of citizens' data. Therefore, one of the biggest impasses of the digital welfare state stems from the fact that the ethical and legal infrastructure of most of the beneficiary countries has not been developed sufficiently yet. Therefore, there are significant risks associated with the safe integration of big data into social policy. At the start of each

project, policymakers need to research from first principles what infrastructure resources are available, what technical requirements are needed to securely integrate big data into their projects, and what benefits and risks will arise.

Various turning points in the transformation of welfare states in the historical process are included in the text in detail. However, perhaps the most important of these turning points is the Covid-19 pandemic. Digital technologies, which are almost at the center of daily life during the pandemic period, bring to mind the concept of "creative destruction" by the famous economic thinker Schumpeter. The question to be asked here is “Have digital technologies led to new creative steps?” The question is still being debated today. The digital transformation of public services is generally portrayed as a “disruptive” development, as it fundamentally changes the way individuals in society receive welfare services and the way welfare providers provide them. The main concern here is how social problems are defined and how they are tried to be solved in response. Designing digital technology for social policy and social policy for digital technology not only needs to involve multiple perspectives, but social policy researchers and advocates need to engage people in identifying digital technologies that address the needs of social policy buyers – for example, people with disabilities who have long focused on their own experience (like creating alternative technologies). In the light of all these benefits, risks and deadlocks, the points to be considered in digital welfare state applications can be summarized as follows:

• Providing high quality and affordable broadband access for all, in order to prevent the emergence or deepening of digital inequalities,

• Empowering individuals with the skills needed to succeed in a digital economy and society.

• Fundamental rethinking of education systems, promoting digital skills and lifelong learning for all age groups,

• Carrying out comprehensive studies specific to societies' own social fabrics in the execution of digital welfare state policies.

• Ensuring that no one's personal data is damaged by paying maximum attention to ethical and privacy rules at the point of access to data,

• Digital social welfare practices should be prevented from causing new social risks due to data breaches and accessibility.

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