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Invitation for feedback

This working paper presents ongoing research and we welcome any feedback you may have. It offers an overview of current discussions and debates to guide the next phase of our study. At this stage, it is not intended to inform policy but rather to outline key research areas. We look forward to your comments, thoughts, and suggestions to refine our analysis and identify areas for further exploration in the next phase.

Please provide comments by 31 March 2025 to: dfaproj@soas.ac.uk.

Summary

This working paper examines the digitalisation of food assistance in the UK, focusing on its implementation, challenges, and socio-political implications. It is structured into distinct sections to guide readers through a presentation of the findings gleaned from our exploratory, Phase I research into digitalising food assistance practices in the UK case study of this ESRC-funded research project, 'Digitalising Food Assistance: Political economy, governance and food security effects across the global North–South divide'. At this stage, the primary purpose of this paper is not to inform policy but to outline research lines of inquiry that encourage critical reflection on opportunities for future improvements.

The UK is committed to digitalising welfare services, with Universal Credit (UC) as a central pillar in initiatives to digitalise food assistance. While the aim of these initiatives is to enhance efficiency and accessibility, they occur against a backdrop of rising poverty and food insecurity, raising questions about how digitalisation intersects with these trends. The main objective of this working paper is to understand how digitalisation affects vulnerable populations and their ability to meet basic needs, especially food.

The research combines perspectives from political economy, governmentality, and food security. It examines food assistance as a tool of governance, exploring its role in surveillance, power dynamics, and socio-economic hierarchies. The framework establishes the importance of analysing digital practices as active shapers of social and economic relations.

The working paper presents the research conducted in an exploratory phase of a wider research project driven by three key questions:

- 1. To what extent have food assistance practices been digitalised, and why?
- 2. How do digital practices influence inequality, power relations, and governance?
- 3. What are the implications of digitalisation for the food security of marginalised populations?

The research uses qualitative methods, including interviews, observations, and desk-based research. Purposive sampling was used to obtain diverse perspectives to enhance validity. The methodology emphasises the exploratory nature of this phase and sets the foundation for more in-depth research in Phase II.

Poverty, food insecurity, and welfare reform in the UK, is linked to neoliberal

policies and austerity measures. Digitalisation, while promising efficiency, has often excluded marginalised groups and exacerbated inequalities.

The working paper examines the following digitalised food assistance initiatives:

Universal Credit (UC): The cornerstone of the UK's welfare digitalisation, UC is intended to streamline benefits into a single monthly payment, promote efficiency, and encourage work by simplifying welfare support systems. It is critiqued for accessibility barriers, algorithmic errors, and punitive surveillance mechanisms.

Healthy Start scheme: A prepaid benefits card designed to support low-income families in purchasing vegetables and milk, the scheme's digital transition has faced teething challenges, including uptake and accessibility.

Cashless free school meals (FSM): These were introduced to reduce stigma, but cashless systems encounter issues like digital exclusion and privacy concerns, as well as wider challenges related to auto-enrolment and dinner money debt.

Aspen card for asylum seekers: A debit-type card to provide financial support to asylum seekers. This system faces criticism for its potential for the surveillance of users and its role in perpetuating a 'hostile environment' for migrants.

Charitable food sector: Through a number of apps (and websites) the integration of digital tools in food banks and shares has streamlined operations. Concerns have been raised, however, about volunteer burn-out, inequities among organisations, and reliance on food surplus as a systemic response to food insecurity.

Key emerging themes explored in the working paper include:

Digital exclusion: Vulnerable populations face barriers to accessing digital systems, not only due to limited internet access and digital literacy, but also as a result of broader, preexisting socio-economic exclusions.

Reliance on brokers: Non-state actors, such as charities and community organisations, bear the burden of addressing gaps in digitalised systems.

Data sharing and surveillance: Concerns about privacy and the use of beneficiary data raise questions about governance and user autonomy.

The role of private sector actors: Private sector stakeholders play a key role in the UK's welfare digitalisation and these stakeholders benefit from the ways in which digitalisation is implemented in certain food assistance practices.

Invisibility: Digitalisation risks isolating recipients by removing the social dimensions of welfare support.

The working paper concludes that, while digitalisation has modernised food assistance practices, it often fails to meet the needs of marginalised populations, reinforcing structural inequalities. Phase II will build on these findings to explore digital exclusion, financial behaviours, and the role of private sector actors in greater depth, focusing in particular on the experience and food security of marginalised populations.

1. INTRODUCTION

In recent years, the digitalisation of government services has deeply transformed the delivery of essential services in the UK, with successive governments, regardless of political leanings, promoting digital technology as a means to offer 'better public services' and a 'more productive and efficient government' (GDS, 2023). The range and scale of digitalisation is particularly evident in the welfare system, which provides vital support for basic needs such as for food, housing, and energy.

UC is the cornerstone of the UK's digitalisation of welfare services. It was launched by the Conservative and Liberal Democrat coalition government, designed to streamline seven different legacy benefits payments, ranging from child benefit to housing and unemployment benefits, into a single monthly payment that is digitally applied for and managed, with the aim of reducing administrative costs, encouraging employment, and making welfare support more efficient and accessible through an online platform (DWP, 2010). These transformations were initially met with applause and enthusiasm, as highlighted in a report by McKinsey & Co.:

The launch of gov.uk in 2012 marked the creation of one of the most accessible digital-government services in the world. Its success in providing citizens, businesses, and government users with accurate, streamlined, and comprehensive services is the result of strong central leadership and implementation provided by the UK's Government Digital Service. (Dilmegani et al., 2014, p. 5)

Yet, parallel to these technological advancements, the UK has been facing a stark reality: an increasing number of people are slipping into poverty and deepening food insecurity (Cuffe, 2024; Food Foundation, 2024; Francis-Devine, 2024a; Joseph Rowntree Foundation, 2024).

According to the World Bank's (2024) food security data, among the G7 nations, the UK has the second-highest prevalence of severe food insecurity as a percentage of its population, surpassed only by Italy – a country whose nominal GDP is 1.5 times smaller.

As food insecurity has risen, so has the number of food banks and assistance programmes and initiatives like the Healthy Start voucher scheme and free school meals schemes designed to provide support to the vulnerable (Lewell-Buck, 2023; Trussell Trust, 2023; Francis-Devine et al., 2024; Thayaparan, 2024).

This raises a critical question: how might increasing digitalisation intersect with these trends in food insecurity and poverty? While much of existing research has explored the general dimensions of digitalisation in the UK's welfare system and its implementation (Cheetham et al., 2019; Coles-Kemp et al., 2020; Beck et al., 2024), less is known about its practical and systematic implications for vulnerable populations with regard to food assistance practices and people's ability to meet basic needs, and its actual effect on their food security. In particular, the political and economic effects of the combination and compounding of digitalising food assistance practices on the marginalised users of these practices are underresearched for the UK and other contexts (Sandvik et al., 2014; Alston, 2018).

To address these critical gaps, this research aims to uncover how the digitalisation of food assistance shapes vulnerability to food insecurity, functions as a tool of governance, and impacts power dynamics within society. We analyse not only the practices and operational effectiveness of digitalised food assistance but also its broader socio-political effects on the populations it is intended to serve. This paper presents our preliminary findings, primarily addressing the first of our three research questions (please see section 1.2 for details), and offers initial insights for the second phase, identifying areas for further exploration.

1.1 Analytical framework

This research combines the concepts of 'regimes of practices', political economy, governmentality, and food security from both structural and population-level perspectives. We identify the range of practices associated with digitalised food assistance, the underlying needs, assumptions, and ideologies of the government authorities, organisations, businesses, and users involved at international, national, and local levels. This enables us to analyse not only the intended functions of food assistance and its digitalisation but also what they actually do (Schaffer, 1984; Foucault, 2007). This includes looking at businesses (providers of financial, technology, data management, communications, and retail services), organisations (charities, food banks, social movements), authorities (political actors, technical ministries, local governments), and public users of these digitalising services (particularly from marginalised groups such as ethnic minorities, disabled people, older people, single-parents, and those precariously employed).

In this way, food assistance is analysed as a form of governance, incorporating aspects of surveillance and how assistance influences or disciplines behaviour. This is combined with a political economy analysis to explore how aid can perpetuate existing power dynamics and hierarchies – maintaining power for

some while creating vulnerability to food insecurity in others (Duffield, 1994, 2018, 2021; Keen, 1994; Mkandawire, 2005).

Finally, the research aims to understand the structural causes of food insecurity, considering factors such as social networks, labour relations, food subsidies, and markets (Pottier, 2016), and the role of technologies in shaping these dynamics. For example, we explore how practices such as digital platforms for benefit distribution, mobile apps for food surplus management and distribution to food banks, and data-driven eligibility assessments influence accessibility and autonomy. Through this lens, we aim to understand the broader political, economic, and social implications of digitalised food assistance systems.

This approach moves beyond technocratic perspectives that view digitalisation as a neutral or simply technical process. Instead, it emphasises that digital technologies and the process of change to incorporate them into food assistance, such as mobile apps, smart cards, and online platforms, actively shape the political, economic, and social structures in which food and welfare assistance is embedded.

1.2 Research questions

This conceptual lens forms the basis of the following research questions:

Q1: To what extent have food assistance and social welfare practices been digitalised, and why? What are the key organisations, authorities, and businesses involved?

Q2: How do digital practices interact with political and economic processes (linked to food) to influence inequality and power relations? How do they govern populations and influence their actions?

Q3: What are the implications of digitalising food assistance for the food security of marginalised populations?

The paper opens with a methodology section, followed by a historical and contextual overview of food insecurity and digitalisation in the UK. It then presents identifies and describes the digital food assistance practices we encountered in this first phase of research, setting the stage for the analysis. Drawing on insights from interviews, observations, and exploratory conversations conducted during the Phase I fieldwork, the paper then presents key emerging issues and themes. These

findings illuminate the cascading effects of welfare reforms and the expanding digitalisation of food assistance, underscoring the intricate relationships between digitalisation, welfare policy, and social inequality.

2. METHODOLOGY

This Phase I investigation into digital food assistance in the UK was led by two SOAS researchers, Iris Lim and Susanne Jaspars. Working closely with their collaborating partner, the Food Foundation – an organisation involved in food policy and advocacy – this team brought together a unique blend of academic expertise and policy insights, leveraging both research and advocacy networks to enrich the study.

Given the exploratory nature of the research, the methods employed are qualitative, providing a means of examining lived experiences, interactions between digital practices and political and economic processes, and causal linkages with food security outcomes (Bryman, 2008). This exploratory phase included a literature review, semi-structured interviews, and observations. The combination of interviews and observations facilitated cross-checking data, enhancing the validity and reliability of the research findings by confirming, complementing, or challenging the insights gained from each method (Patton, 2014).

The data collection during Phase I, conducted between August 2023 and April 2024, integrated desk-based research, observations, and semi-structured interviews to establish a foundational understanding of the digitalisation of food assistance and related policies. Broadly speaking, the semi-structured interviews explored the following: changes in food assistance practices, the potential reason for these (focusing particularly on digitalisation), the different dimensions of the digital practice, risks and benefits, and thoughts on the future of digitalisation. The analysis of issues in Phase I will inform the more in-depth fieldwork planned for Phase II.

People, organisations, authorities, or businesses interviewed were identified in collaboration with our partners, the Food Foundation, or through our own pre-existing networks. Purposive sampling was chosen in this exploratory phase of research for its methodological flexibility, adaptability, and efficiency, which were essential for rapidly gaining contextual insights and initiating the research process (Patton, 2014). This approach allowed us to concentrate resources on the most informative cases while ensuring the inclusion of diverse perspectives, making it particularly well-suited for the initial stages of this inquiry (Patton, 2014).

2.1 Semi-structured interviews and exploratory discussions

Interviews and exploratory discussions were conducted to gather qualitative data from a diverse range of stakeholders. Participants were selected using purposive sampling of individuals with specialised knowledge, experience of, or direct involvement in food assistance, digital inclusion, or related fields.

Participants were asked a range of open-ended and targeted questions designed to explore their experiences, practices, and perspectives related to food assistance and its digitalisation. Questions included inquiries about their specific roles and projects, the digital tools they used or supported, and challenges faced by service users in accessing food assistance. Topics also covered the impacts of digitalisation on food security, organisational practices, user experience issues, and the broader political and economic dynamics of food assistance systems. For example, participants were asked how digitalisation affected user accessibility, what underlying ideologies and motivations were observed among stakeholders, and how local and national policies influenced food security outcomes. These questions aimed to capture both macro-level policy implications and micro-level lived experiences.

A total of 19 interviews and exploratory discussions were conducted, as follows (see Appendices for more details):

Academics (4): Exploratory discussions with four scholars who are experts on food policy or food security, and/or aspects of digitalisation, providing theoretical and research-based insights into the issues at hand. One also volunteered for housing support charity.

Food and welfare policy advocates (3): Interviews with three policy advocates offered perspectives on grassroots and advocacy-driven responses to food and welfare policies and awareness of digitalisation in these circles.

Local council/authority's action representative (1): One interview with a local council official provided insights into the implementation of food assistance and digitalisation strategies at the level of local government.

Macro-economist (1): One interview a macro-economist provided a greater understanding of the role of welfare and food assistance services for states, stabilising demand within an economy and contributing to a more equitable and sustainable macroeconomy.

Food banks/share representatives (4): Four interviews were conducted with individuals involved in the daily operations of food banks, offering practical perspectives on the effects of digitalisation on service delivery.

Refugee user (1): One interview with a refugee who accesses food assistance services highlighted the user experience (UX) of refugees navigating digital systems for public support.

Community food sector (1): One informal discussion with a charity representative provided additional organisational insights into the integration of digital practices in food assistance in the UK at local and national levels.

Business sector representative (1): An employee of a major grocery store chain provided some business sector perspectives on digitalisation efforts in food assistance.

User experience (UX) researchers (2): Interviews with two UX researchers offered an understanding of the design and usability challenges in developing digital tools for food assistance and gave insights into benefits and difficulties of current development and design processes digital services.

Digital inclusion supporter from library (1): One interview with a provider of digital inclusion support at a library shared experiences of helping recipients navigate the digitalising local government support systems.

Through this purposive sampling we tried to obtain a snapshot of the range of digital practices in food assistance and knowledge about their application and use. The data captured both the macro-level policies and the micro-level experiences of those interacting with digitalised food assistance systems.

2.2 Observations

Observations formed a key component of the data collection process, providing contextual and behavioural insights within target settings. Access for observations was obtained using prior connections to identify settings that were typical of common operational practices and participant experiences in food assistance and digital inclusion contexts:

- Food bank/share: Observations at three food banks provided insights into day-to-day operations and the integration of digital tools in food distribution processes.
- Digital inclusion class: A session at a digital inclusion class was observed, offering a view of how digital literacy is being addressed among vulnerable populations, which is crucial for accessing digital welfare services.

Additionally, informal observations were made during the first phase of fieldwork – including neighbourhood walk-throughs to identify spaces and practices of food assistance, attendance at food policy working sessions and webinars, and participation in government events – which contributed to a broader understanding of the political, strategic, and organisational dynamics of food assistance and digitalisation. While these experiences were not part of the structured observation plan and are not included in the formal dataset, they provided valuable contextual insights that informed the interpretation and framing of the research findings in this exploratory phase.

2.3 Desk-based research

The desk-based research phase of this study focused on examining central and local government policy documents, strategy papers, communications, blogposts, and press releases to identify key food assistance practices and services. This research also included reviewing materials produced by non-governmental organisations, charities, and community groups, such as reports, advocacy papers, and blogs, to gain a broader perspective on the landscape of food assistance and digitalisation. These efforts were critical for pinpointing specific digitising practices and selecting research sites for fieldwork. By analysing these diverse sources, the desk-based research also corroborated data collected from observations and interviews, grounding the findings in comprehensive, multisource evidence. This desk-based analysis provided a strong foundation for the more detailed social and journey-focused service mapping and research planned for the next phase.

2.4 Limitations

One significant limitation was the difficulty encountered in gaining access to the business sector involved in the digitalisation of food assistance. Despite efforts to contact key businesses engaged in this sector, we had limited success. This gap in engagement hindered the ability to fully understand the commercial dynamics and motivations behind digitalisation initiatives. In the second phase of research, we aim to achieve greater traction with the business sector and integrate a more comprehensive view of the interplay between commercial interests and digitalised food assistance. To mitigate this limitation, we have established a back-up plan to seek relevant information through publicly available materials, such as corporate reports, industry analyses, and trade publications. These alternative sources will provide additional insights and help contextualise the role of businesses in shaping digitalisation practices within food assistance systems.

3. UK CONTEXTUAL AND HISTORICAL BACKGROUND

Over the past two decades, the UK government has pursued a sweeping agenda to modernise public services, particularly within welfare and food assistance, as part of a broader commitment to digital transformation. The increasing digitalisation of these services was founded on efforts to enhance efficiency, accessibility, and cost-effectiveness across government operations. This transformation was initiated and actioned through several high-profile strategies, including Digital Britain (DCMS and DBIS, 2009), the 'Digital by Default' agenda (GDS, 2012), 'Government as a Platform' (Bracken, 2015), and the 'Levelling Up' agenda (DLHC, 2022). These initiatives have sought to make digital platforms the primary means for public users to access essential services, accelerating the shift towards online registration for welfare and food assistance and integrating artificial intelligence (AI) and automated systems to determine and measure eligibility (Griffiths, 2024; Yuill, 2024).

Before the consolidation of the UK's seven separate benefits schemes was digitalised through the online, means-tested, single-payment system of UC (Citizens Advice, 2021), individuals applying for benefits navigated a fragmented system that required separate applications for each type of support, resulting in complex service journeys involving phone calls and frequent physical attendance

(Press Association, 2009). For example, claimants for Jobseeker's Allowance (JSA) were required to attend in-person interviews at Jobcentres, where they provided evidence of job-seeking activities to maintain their eligibility. This process often involved frequent appointments and compliance checks, which could be time-consuming and rigid in structure (Latham, 2009). Similarly, Income Support and Housing Benefit applications were managed separately, with claimants often having to submit lengthy paper forms to local council offices. These forms required proof of income, housing arrangements, and other eligibility documentation, which had to be updated by paper regularly to ensure continued access to benefits (Secretary of State for Work and Pensions, 2006).

In addition to consolidating disparate schemes into one system, a key aspect of this digital transformation is datafication – the process of converting social, economic, and administrative activities into quantifiable data – and interoperability, allowing different systems and organisations to share and utilise information across platforms (Bellanova and Glouftsios, 2022; Campmas et al., 2022). Recent years have seen an increasing effort towards the integration of data across services like UC and other government platforms and authorities, enabling a centralised, interoperable system for managing and tracking recipient data. For example, UC consolidates multiple benefits into a single, data-integrated payment system (DWP and IFF Research, 2018). Recently, the Department for Work and Pensions (DWP) contracted Cappemini for £2 million to develop application programming interfaces (APIs), which are sets of protocols and tools enabling different software systems to communicate with one another. These APIs aim to provide real-time access to UC data for local authorities, facilitating seamless integration between DWP systems and local government services (Say, 2024).

These digital and data-driven dimensions of the UK's welfare system are intensifying. In late 2024, the UK government introduced the Fraud, Error, and Debt Bill, a proposal designed to enhance the DWP's ability to access detailed information from benefit recipients, such as bank records (DWP, 2024b; NSUN, 2024). By providing real-time access to financial data, the bill underscores the government's intent to make welfare administration increasingly data-centric, while also enabling more automated and streamlined benefits sanctions (DWP, 2024b; NSUN, 2024).

However, alongside the benefits of simplifications made to service journeys for claimants, operational efficiencies, and reinforced accountability, digitalisations can present significant risks. For instance, the implementation of a digital-first approach risks marginalising those who are less digitally and socially included, who lack both the access to necessary technology and skills but also the power to counter exclusions (see section 3.4 for digital exclusion). Concerns about privacy and increased data vulnerability for public users have also been raised (Hintz et al., 2017; Disability Rights UK, 2022).

To contextualise these risks, the following sections will offer a brief overview of the UK's history and landscape of poverty, food security, and welfare, alongside its distinct approach to digitalisation and the development of digital infrastructure that shapes welfare and food assistance delivery practices.

3.1 Deepening poverty and food insecurity

The UK's shift towards digitalising welfare services has occurred alongside a marked rise in poverty and food insecurity. Since 2010, poverty levels have grown significantly, driven by austerity measures and multiple economic downturns (Joseph Rowntree Foundation, 2024). Food insecurity has also worsened, further exacerbated by the Covid-19 pandemic and the recent cost-of-living crisis (Goudie and McIntyre, 2021). Food prices in the UK have risen significantly during the cost-of-living crisis, with the Office for National Statistics (2024b) reporting that the cost of food and non-alcoholic beverages increased by 19.1% in the year leading up to March 2023, the sharpest annual rise since 1977.

Austerity measures, economic downturns, and rising food prices have directly impacted people's lives. The DWP's Households Below Average Income (HBAI) survey for FYE 2023 highlights that the poorest 20% of households spend a higher proportion of their income on food than the rest of the population, making them particularly vulnerable to fluctuations in food prices (DWP, 2024a). Since 2016, incomes for these households have decreased, further entrenching their vulnerability to food insecurity (Francis-Devine, 2024a). The Joseph Rowntree Foundation notes that from 2019/20 to 2021/22, individuals living in poverty had incomes that averaged 29% below the poverty threshold, a rise from 23% between 1994/95 and 1996/97 (Joseph Rowntree Foundation, 2023). The most impoverished families, residing in severe poverty, had incomes averaging 59% below the poverty line, resulting in people having to make impossible decisions about affording basic needs like food, energy, and housing (Joseph Rowntree Foundation, 2023).

A long-term rise in food insecurity is evident, reflecting the cumulative impact of austerity measures, stagnating incomes, and economic inequality. Food insecurity has worsened since the 2008 global financial crisis, and subsequent crises, such as the COVID-19 pandemic and the cost-of-living crisis, have exacerbated the problem.

Data from Trussell, a UK charity supporting food banks providing emergency food, indicate a dramatic rise in food bank usage over this decade as a result of

this deepening poverty. In 2010/11, approximately 61,000 three-day emergency food parcels were distributed, but this number soared to over 2.5 million parcels in 2020/21 (The Trussell Trust, 2023). The Independent Food Aid Network (IFAN) has shown similar increases (IFAN, 2024), and perhaps most remarkably the number of food banks or food share schemes in schools has increased so much in the past couple of years that the majority of food banks and shares are now in schools, with an estimated 5,000 in the UK (Baker, 2024; Baker and Bakopoulou, 2023; Baker et al., 2024). In June 2024, the Food Foundation estimated that 7.2 million adults, and 18.7% of households with children reported that children were experiencing food insecurity within the previous month (Food Foundation, 2024).

3.2 Historical background: continuities from 1979 to present

The deepening of poverty and food insecurity in the UK can be traced back to neoliberal policies initiated during the Thatcher government beginning in 1979. Margaret Thatcher's administration marked a significant shift towards neoliberalism, characterised by deregulation, privatisation, and a reduction in the role of the state in providing welfare. These policies aimed to reduce public expenditure and promote free-market principles, fundamentally altering the landscape of the UK's social welfare system (Taylor-Gooby, 2012). The influence of Margaret Thatcher's government on contemporary welfare reform has been profound. Thatcher's market-oriented reforms in the 1980s, combined with a reduction in state welfare provisions, laid the groundwork for successive governments to continue in a neoliberal direction.

Under the New Labour government (1997–2010), the UK experienced a significant reduction in poverty, primarily due to targeted social protection policies. These included the introduction of tax credits, such as the Working Tax Credit and Child Tax Credit, increased child benefits, and investment in early childhood programmes like Sure Start centres. Relative child poverty fell from 26% in 1996/97 to 18% in 2010/11, demonstrating the effectiveness of these redistributive measures (Joyce and Sibieta, 2013). However, while New Labour's policies successfully reduced poverty, they relied heavily on social transfers rather than fostering structural changes in the labour market, such as promoting secure, well-paid jobs. Critics argued that this created a system dependent on sustained government spending, leaving it vulnerable to policy reversals (Hills and Stewart, 2005).

The vulnerability of this system became evident during the austerity measures

implemented by the coalition government (2010–2015). The significant cuts to welfare spending, including reductions in tax credits and child benefits, disproportionately affected low-income households. Research from the Joseph Rowntree Foundation highlights that child poverty began to rise again after 2010, reversing much of the progress made during the New Labour years (Joseph Rowntree Foundation, 2021). Moreover, the austerity agenda exposed the reliance of low-income families on redistributive measures, as the lack of structural improvements to labour markets, such as wage growth and job security, compounded the effects of welfare cuts (Taylor-Gooby and Stoker, 2011). Thus, while New Labour's focus on social protection achieved notable short-term gains in reducing child poverty, it inadvertently created structural vulnerabilities that became apparent during periods of fiscal retrenchment.

3.3 Austerity and its aftermath

The UK is no longer officially in a period of austerity as it was during the coalition government era (2010–2015), but certain features of fiscal restraint and spending cuts remain. Since the late 2010s, the rhetoric around austerity has shifted, with subsequent governments adopting different approaches. For example, Boris Johnson's administration (2019–2022) moved away from strict fiscal conservatism by increasing spending on public services, including healthcare and education, and introducing the 'levelling up' agenda to address regional inequalities (DLHC, 2022). During the Covid-19 pandemic, the government further departed from austerity, implementing substantial fiscal measures such as the furlough scheme, business grants, and increased healthcare funding to mitigate the economic impact of the crisis (HM Treasury, 2020; Tetlow et al., 2021). More recently, efforts to tackle the cost-of-living crisis, such as energy price caps and direct payments to low-income households, demonstrated a willingness to provide targeted support rather than impose widespread spending cuts (DWP, 2023).

While austerity is slowly being lifted, critics argue that its legacy continues to shape fiscal policy and social welfare. Public sector underfunding, wage restraints, and insufficient welfare provisions are seen as austerity-like measures, particularly as the government navigates economic challenges such as inflation, post-pandemic recovery, and the cost-of-living crisis (Turnbull, 2023; Wamsley, 2024). Welfare benefits have not fully kept pace with inflation or rising living costs, with some pandemic-era cuts not being restored. The government has also maintained tight fiscal rules, aiming to balance budgets and reduce public debt, as reflected in the autumn statement of 2022 under former Prime Minister Rishi Sunak and Chancellor Jeremy Hunt, which focused on reining in spending while

tackling inflation (Weston, 2022). Similarly, the autumn budget 2024, presented by current Chancellor Rachel Reeves, reflects a somewhat less restrictive yet still cautious approach to government spending.

As such, key public services, including healthcare and education, remain underfunded relative to demand, resulting in resource shortages, stress on frontline workers, long waiting times, and industrial action in sectors such as healthcare and education (Campbell, 2021, 2023; Adams et al., 2022; Arrieta, 2022; Koch and James, 2022). These ongoing constraints highlight the political tensions in balancing between fiscal discipline and the need for more robust public support.

3.4 Digitalisation and welfare reform

Digitalisation and the transition to UC are deeply embedded in the political and economic continuities of this history. Although UC was in many ways a much-needed modernisation of a clunky benefits system, as a flagship reform introduced by an austerity government, the implementation of UC and its digital design occurred within the constraints of the austerity paradigm, which fundamentally shaped its design and execution.

Under the banner of cost-cutting and reducing public spending, the government pursued a digital-first approach, under the 'Digital by Default' strategy launched in 2012, aiming to make government services primarily accessible online, thus reducing operational costs and purportedly improving user experience (GDS, 2012). This was done without sufficient investment in the infrastructure or support systems needed to make this transition equitable, as is made clear by the documented struggles of frontline staff in the transition to UC (Muellerleile and Robertson, 2018; Koch, 2021; Beck et al., 2024).

Of course, digitalisation can offer potential to improve welfare systems by reducing bureaucratic confusion, enhancing transparency, and making services more user-friendly and accessible for many (United Nations, 2022). However, online-only applications and management processes without provisions for sufficient digital and material support to guide this transition excluded many vulnerable individuals who lacked digital access, literacy, or both (Citizens Online, 2019; Holmes and Burgess, 2022; Sheldrick, 2023). As a result, significant barriers emerged for users of these services, especially within marginalised and excluded groups, making it difficult for them to access benefits seamlessly.

Regarding digital support, while 96% of UK households had internet access

as of 2023 (Clark et al., 2024), this overall figure masks critical inequalities. For example, 25% of low-income households earning less than £20,000 did not have home internet access, compared to just 4% of higher-income households (Lloyds Bank, 2023). Similarly, 40% of people aged 75 and above do not use the internet at all (Age UK, 2024). These digital exclusion figures show that the very populations who rely most on public services are also those most at risk of being left behind by the digitalisation of welfare.

Digital exclusion disproportionately affects marginalised groups, including low-income individuals, the elderly, people with disabilities, and ethnic minorities (van Deursen and Helsper, 2015; Williams et al., 2016; Harvey et al., 2023; Good Things Foundation, 2024). These populations often lack access to the internet or digital devices and struggle with digital literacy. For instance, 1.7 million UK households reported struggling to afford internet access, and the cost of devices like laptops and smartphones remains a major barrier for these households (Lloyds Bank, 2023). As a result, reliance on digital platforms for welfare services risks exacerbating existing inequalities and creating new barriers to access. For people with disabilities, a study in 2019 found that 22% had not used the internet in the past three months (Office for National Statistics, 2019). The financial cost of connectivity is a concern for many as the cost-of-living crisis in the UK continues. In 2023, 23% of people looked for cheaper internet plans due to rising costs (Lloyds Bank, 2023), indicative of the financial burden that connectivity is for those struggling with food insecurity and poverty.

Material support is also lacking. For instance, the five-week wait for the first UC payment, justified on administrative grounds, has led to widespread financial distress for claimants (Klair, 2020; Porter, 2024). In many cases, this distress pushed individuals into reliance on food banks, loans, or informal support networks (Thompson et al., 2019). These issues are compounded by the underfunding of support services (Thompson et al., 2019; Whitehead, 2020; Koch and James, 2022) – a hallmark of austerity policies – that might otherwise have mitigated some of the challenges claimants face in navigating a digital system.

The shift to digitalisation without sufficient support can be said to reflect other broader Thatcher and austerity-era principles, such as an emphasis on individual responsibility and reducing dependency on state support, revealing the continuity present in the governing rationale underlying these supposed new technological advancements (Newman, 2023; Wamsley, 2024). By transferring much of the administrative burden onto claimants through digital delivery – requiring them to manage their accounts online, update information in real-time, and adhere to stricter compliance requirements – the digital system aligns with the punitive rationale of austerity. Increasingly, it becomes hard to ignore that the digitalisation of welfare, while ostensibly about modernisation and efficiency, has also been a vehicle for embedding neoliberal, austerity-driven practices and principles into the welfare system.

Furthermore, the emphasis on public–private partnerships in implementing digital government solutions continues the neoliberal trend of incorporating market mechanisms into public service delivery (Margetts and Dunleavy, 2013; Kattel and Takala, 2023). These partnerships often lead to concerns about transparency, accountability, and the prioritisation of cost-cutting over the public good (Yerramsetti, 2023).

For example, the UK government's shift towards cashless payments in welfare services involves partnerships with private sector companies to enhance efficiency and oversight. For instance, the Mastercard Prepaid Government Benefits Card, used for digital payments for Healthy Start (see section 4.3 for details) is designed to 'streamline ... [the] government agencies ... [giving them] the ability to be better guardians of public funds and to better serve their customers' by electronically disbursing government benefits such as 'child benefits and job seeker's allowance ... [and] local government funded benefits such as housing benefits' (Mastercard, 2012, p. 2). Mastercard is not the only company involved in the payment of benefits. The Aspen card, a payment card for asylum seekers in the UK (see section 4.5 for more details) works through a prepaid Visa card (Davies, 2024). Additionally, companies like Soldo and Palantir have been approved as public sector contractors reflecting the government's strategy to integrate innovative solutions. Soldo, a business expense management platform, was named a supplier for UK public sector entities in 2023, offering tools for managing and tracking public funds (Catena, 2023). Palantir, known for its data analytics capabilities, has been involved in various government projects, including those related to welfare services (Williams, 2021; Palantir, 2024).

While these initiatives claim to enhance efficiency, they have also raised concerns about user privacy, trust, and equitable access in places they have been implemented. For example, a study on the mandatory shift to benefits card technology in Toronto found that the new system disrupted welfare recipients' relationships with money and increased their sense of surveillance (Barkway, 2023). Similarly, research on Ireland's shift to e-payment for social welfare highlights both operational challenges and increased risks of financial exclusion among vulnerable populations(Csáki et al., 2013). For asylum seekers in the UK, there are concerns about the Aspen card based on its capacity to be used for surveillance (Bennani-Taylor and Meer, 2024). These examples underscore the importance of ensuring that digital solutions do not inadvertently create barriers or distrust for those most in need.

Ultimately, it is challenging to separate the effects of digitalisation from the impacts of austerity, as the two have been deeply intertwined in the UK's welfare reform narrative. While digitalisation has many potential benefits, its implementation under austerity, without adequate support for services and users to make use of these potentials, seems to reinforce structural inequalities, exacerbate

vulnerabilities, and dilute its potential to contribute to a more supportive and inclusive welfare system.

3.5 Marginalised populations and food insecurity

Building on the broader context of welfare reform and digitalisation, it is essential to focus on how these systemic changes intersect with the lived realities of those most affected. This section identifies and examines the demographics most vulnerable to food insecurity and poverty in the UK, highlighting the structural and social factors that exacerbate their precarious situations.

As discussed, decades of neoliberal governance in the UK have contributed to a shrinking welfare state, leaving many communities and marginalised populations increasingly vulnerable to economic downturns and crises (Hamnett, 2014). This trend was intensified by the 2008 recession, or global food and finance crisis, which saw a growth in insecure and part-time jobs and self-employed positions that frequently offered insufficient income (Coulter, 2016; Barker and Russell, 2020; Montgomery and Baglioni, 2021). As a result, the UK has experienced growing labour market polarisation, heightened social inequality, poverty, and increased food insecurity, which affects some demographics more severely than others.

Notably, larger families, particularly those with three or more children, face poverty due to restrictive benefit policies like the two-child limit and benefit cap, which disproportionately affect them. Single-parent households and families with young children are also significantly impacted, with 44% of children in single-parent families living in poverty (O'Connell and Brannen, 2021a, 2021b; Joseph Rowntree Foundation, 2024).

Disabled individuals and informal carers are similarly vulnerable, facing poverty due to extra costs and reduced work opportunities; nearly 31% of disabled people and 28% of informal carers live below the poverty line (Joseph Rowntree Foundation, 2024). The Trussell Trust reports that nearly 75% of households using food banks include someone with a disability or long-term health condition and the Food Foundation's Food Insecurity Tracker consistently finds that households with a disabled person are substantially more likely to experience food insecurity (Food Foundation, 2023a; Trussell Trust, 2023).

Minority ethnic groups, especially Pakistani, Bangladeshi, and Black African

households, experience poverty rates up to 53%, alongside high levels of child poverty and persistent poverty (Joseph Rowntree Foundation, 2024). Factors contributing to the poverty experienced by minority ethnic groups include unemployment, economic inactivity, and concentration in low-paid work, compounded by racialised institutional barriers affecting access to employment, housing, education, and citizenship (Power et al., 2018; Loopstra, Reeves and Tarasuk, 2019; Koltai et al., 2020).

Additionally, migrants and those with precarious immigration statuses, particularly those with No Recourse to Public Funds (NRPF), face severe restrictions that exacerbate their food insecurity (Hamilton et al., 2022) The lack of work permissions coupled with minimal support structures leads to increased precarity and a severe lack of choice for these individuals (Jolly and Thompson, 2023)

Additionally, it is clear that work does not always provide a route out of poverty and food insecurity: part-time workers, self-employed individuals, and those in rented accommodation show high poverty levels (Butler, 2022; Joseph Rowntree Foundation, 2024; Vickers, 2024). Finally, although income-related benefits aim to support low-income households, they often fall short, leaving many recipients in persistent poverty; the base rate of Universal Credit (UC) is below destitution levels, with 41.9% of households receiving UC reporting food insecurity, underscoring the insufficiency of current benefit levels (Food Foundation, 2024).

Geographically, food insecurity in the UK varies significantly across regions, with certain areas experiencing higher rates than others. According to data from the DWP for 2022/23, the North East and North West of England had the highest prevalence, with 12% of people living in food insecure households. In contrast, Northern Ireland reported the lowest rate at 6% (Francis-Devine, 2024b). Further analysis by the University of Sheffield highlights that regions such as Yorkshire and the Humber are particularly affected. For instance, Rotherham and Barnsley are among the top 20% of local authorities with the highest percentages of adults who struggled to access food (Ferguson, 2021). These regional disparities are influenced by various structural factors, including economic conditions, employment opportunities, and access to affordable food outlets. Areas with higher unemployment rates, lower incomes, and limited access to supermarkets or fresh produce are more susceptible to food insecurity (Lockwood, 2018;ONS, 2024a).

3.6 Section conclusion

The trajectory of the UK's digitalisation in welfare and food assistance is deeply embedded in a historical context shaped by neoliberal priorities that emphasise efficiency, cost-cutting, and market-oriented solutions. While digital transformation offers the promise of streamlined services and improved administrative efficiency, its implementation thus far has disproportionately excluded the most vulnerable populations. The exacerbation of poverty, food insecurity, and digital exclusion highlights significant inequities based on the design and delivery of these systems. These outcomes call for a critical reassessment of the policies and principles underpinning welfare digitalisation.

4. IDENTIFYING DIGITALISED FOOD ASSISTANCE PRACTICES

As highlighted in the preceding sections, the past 10–15 years have seen a significant expansion of food assistance initiatives in the UK, driven by growing food insecurity exacerbated by austerity measures, the Covid-19 pandemic, and the ongoing cost-of-living crisis. Food assistance initiatives encompass programmes, services, and mechanisms designed to provide access to food for individuals and households experiencing food insecurity. These range from food banks (charitable organisations distributing donated food) to food vouchers (electronic or paper systems enabling purchases at designated outlets) and food shares (community-based initiatives that collect and redistribute surplus food to those in need, sometimes for a small need-based fee). While these initiatives aim to address immediate food needs, they also reflect varying levels of involvement from state, private, and community actors in tackling the structural causes of food insecurity.

Given the increasing integration of digital technologies into welfare systems that this research focuses on, the following section examines the digitalisation of food assistance practices identified during Phase 1 of the research. By exploring key initiatives – such as UC, digitalised food bank operations, the Healthy Start scheme, cashless free school meals, and the Aspen card system for asylum seekers – it aims to shed light on how digital technologies are transforming food assistance in the UK. These practices illustrate broader shifts in welfare provision, balancing potential benefits of innovation and efficiency with persistent

challenges of accessibility, equity, and dignity for vulnerable populations. This analysis outlines the key features, stakeholders, and barriers associated with these digital interventions, providing a critical lens on their implementation and impact.

4.1 Universal Credit

Universal Credit (UC), introduced in 2013, is a central component of the UK's welfare system, consolidating six separate benefits into a single monthly payment. Legislated under the Welfare Reform Act 2012, UC replaced Child Tax Credit, Housing Benefit, Income Support, income-based Jobseeker's Allowance (JSA), income-related Employment and Support Allowance (ESA), and Working Tax Credit (Citizens Advice, 2021).

While UC is not explicitly a food assistance initiative, it plays a critical role in determining food security for millions of low-income households, and it is well-known that such households use UC payments to meet basic needs, including the purchase of food (Jitendra et al., 2018; Reeves and Loopstra, 2021). At the same time, we know that UC recipients are among the most food insecure (see section 3.5). The digital-by-default design of UC further underscores its importance in this analysis. Its digital infrastructure forms the foundation for other digitalised welfare and food assistance systems, making it a benchmark for examining the integration of technology into government welfare delivery in the UK.

As of January 2024, approximately 6.4 million people are receiving UC payments, with plans to transition the remaining 900,000 households by the end of the 2024/2025 tax year, which is in March 2025 (DWP, 2024d; Mackley et al., 2024). The roll-out of UC is divided into two types, 'natural migration' for those making new benefit claims getting onto UC and 'managed migration' for those already on legacy benefits systems moving onto UC (Thompson et al., 2019). There is no automatic switch or enrolment onto UC.

The implementation of UC has been, and continues to be, plagued by operational challenges. Early pilots faced numerous issues, including delays, IT failures, and poor communication, leading to significant personnel changes within the DWP and criticism from both staff and beneficiaries (Wintour, 2013). Challenges of various dimensions have continued beyond this troubled roll-out, impacting claimants' ability to access the food and other basic needs that UC is meant to support.

4.1.1 Issues specific to digitalisation

The shift to the digital UC system is plagued by issues affecting both front-end user experiences and back-end algorithms and automation.

Regarding front-end user experiences, the digital-by-default design requires claimants to apply online and manage their accounts through a digital portal. Communication with the DWP occurs primarily through an online journal system, and an algorithm determines payment. As such, UC assumes access to the internet and adequate digital literacy, which does not match the reality for many claimants. Reports indicate that more than 43% of claimants needed support from friends, family, Jobcentres, or charities to apply for UC, placing additional strain on frontline support services (DWP and IFF Research, 2018).

On the back-end, the algorithms determining the payment amount claimants receive have been criticised for errors leading to underpayments or overpayments. This results in UC delivering inconsistent amounts, leading to difficulties for claimants in planning their finances and thus deepening food insecurity among them (Booth, 2023, 2024; Chaplin, 2024). Changes in income, irregular payroll schedules, or overlapping payments within a single assessment period can also result in inconsistent amounts, leaving many claimants unable to plan their budgets effectively (Griffiths, 2024). Deductions for advance repayments, overpayments, or debts further reduce payments, while algorithmic errors and administrative complexities significantly impact food security, with claimants frequently unable to afford essential items and turning to food banks for support (Thompson et al., 2019; Reeves and Loopstra, 2021; Chaplin, 2024).

Conditionality and the increased surveillance capacities enabled by digitalisation within the UC system have also raised concerns. Claimants are required to fulfil strict conditions, such as job search obligations or participation in training programmes, monitored through the online journal system (Cheetham et al., 2019; Wright et al., 2020). Although these obligations had been growing prior to the introduction of UC, the UC system allows for rapid action through sanctions, without much chance for claimants to counter them (Chaplin, 2024; Lim, 2024). This constant monitoring can lead to stress and anxiety, as claimants fear sanctions either through unintentional mistakes or flaws within the UC system itself.

4.1.2 Natural and managed migration

The migration onto UC seems to be a particular pain point for claimants. For those beginning to claim UC, reports frequently cite difficulties that claimants face in understanding the migration process, accessing necessary information, and adjusting to UC's demands, including its digital management system

(Ruddick-Trentmann, 2024; Stacey, 2024). For those just getting onto UC, there is a wait period of five weeks until the first payment, which is a significant burden on claimants already stretched for cash (Klair, 2020). Additionally, the Child Poverty Action Group (CPAG) has documented instances of UC awards being calculated incorrectly by UC's algorithms and safeguards being inconsistently applied. These issues have left many households in financial hardship, with some facing the risk of losing all income temporarily (CPAG, 2024c). While the government has allocated an additional £90 million in the 2024 autumn budget to accelerate the migration of claimants to UC, reports of systemic errors and poor communication by organisations and individuals raise concerns that the funds will just be used to 'push migration through' and fail to support claimants sufficiently (Chaplin, 2024).

For vulnerable claimants, disruptions to their benefits during the managed migration onto UC can worsen poverty and food insecurity. Analysis by the Trussell Trust found a 52% increase in food bank referrals in areas where UC had been recently implemented. Similarly, the National Audit Office (NAO) reported a sharper rise in food bank usage following the full roll-out of UC (NAO, 2018; Thompson et al., 2019; Porter, 2024).

In sum, while UC's digitalisation has modernised the welfare system, it has not been done in a such way that improvements benefit all the stakeholders involved. The current lack of accessibility, algorithmic errors, roll-out concerns, and insufficient payments result in increased poverty and food insecurity for claimants, pointing towards a need to rebalance the rationales and priorities built into the design of the system.

4.2 Digitalisation with the charitable food sector: food bank and community food share practices

The above-mentioned combination of UC insufficiencies has forced claimants in many instances to rely on a patchwork of additional food assistance and other basic needs support to address the gaps left by UC. The Trussell Trust notes that 'the move to Universal Credit, has led to increased demand for support from local welfare schemes' (Thompson et al., 2019, p. 19). The following sections examine these supplementary food assistance practices, exploring whether and how they are incorporating digital tools and processes. These initiatives, ranging from food banks to various cash payments, aim to address the unmet needs of vulnerable populations in increasingly digitalised ways.

Starting with the digitalisation present in the UK's charitable food section, in recent years, food banks and food shares in the United Kingdom have increasingly incorporated digital tools to manage operations, donations, and distributions. Food banks primarily provide emergency food parcels to individuals and families experiencing acute food insecurity. Access to food banks often requires a referral from a professional or support worker, such as a GP, social worker, or housing officer. These parcels are typically pre-packaged and may not allow recipients to choose specific items, as the primary goal is to meet immediate needs. In contrast, food shares focus on redistributing surplus food from retailers, producers, or community sources to reduce food waste. Unlike food banks, food shares often operate on a more open-access basis, where individuals can choose from available food items, fostering greater autonomy and dignity. Food shares may also incorporate pay-as-you-feel models, encouraging community participation and sustainability. The people working or volunteering in food banks and community food shares we interviewed and observed all used a variety of digital practices (Observations O2, O3, and O4, 2024).

The stakeholders involved in the charitable food sector are diverse. There are those who run and manage the food banks and food shares; there are volunteers who play a critical role in supporting operations, often handling the digital logistics of interacting with the digital apps and collecting and distributing food; and there is a diverse range of food bank users (Key informant 14, 2024; Observation O3 and O4, 2024). There are also the supermarkets and food retailers donating surplus food, thereby reducing their business's waste and 'improv[ing] brand engagement' (Neighbourly, 2024). Technology companies develop and maintain the apps and platforms that facilitate the redistribution of food. Finally, the recipients are individuals and families relying on food assistance to meet their basic nutritional needs.

Digital practices used by this sector include online referral systems, such as Origin Case, used by London borough councils like Islington, Camden, Hackney and Wandsworth, Refernet, used by Citizens Advice. Frontline is used by Essex, Northumberland, and Broxbourne district and county councils (Observation O4, 2024), linking food bank visitors to other available support services in the community. We also observed a range of ways food banks managed internal communications and data, through simple Excel spreadsheets or more organisation-specific platforms, such as the Trussell Trust Database (Key informant 3, 7, 16, 2024; Observation O4, O5, 2024). More research is needed on the impact of referral systems in this research but there initial issues have been raised around the difficulties of balancing data sharing and recipient data privacy (Key informant 7, 2024).

² Research data referenced in this document follows a consistent convention: interviews are cited using the key informant's number and the year the conversation took place (e.g. Key informant 3, 2024), while observational data is noted as an observation, followed by its corresponding number and the year it was conducted (e.g. Observation O2, 2024). Both align with the detailed tables of interviews and observations provided in the Appendices for cross-referencing.

A practice that has been particularly prevalent in the UK's charitable food sector has been the use of apps like, FareShare and Neighbourly, to manage inventory and mobilise surplus food from businesses for food insecurity. These apps connect supermarkets and other food businesses with food banks and shares to redistribute surplus food or help raise funds for the issuance of digital vouchers or process donations (Key informant 3, 7, 10, 2024; Neighbourly, 2024). This was largely deemed a positive initiative for efficiently reducing food waste while ensuring a steady supply of surplus food to support food banks and shares.

However, despite the positive intentions of food shares to remove the stigma of going to food banks through a message of environmentalism and emphasising to users that they are helping to address the problem of food waste by taking the surplus (Key informant 3, 10, 16, 2024; Observation O2, 2024), the reliance on volunteers and volunteer action for addressing the scale of food insecurity present in their communities was a concern for all the food banks and food shares we spoke with and observed (Key informant 3, 7, 10, 14, 16, 2024). The mobilisations of food business surplus on these digital platforms often require substantial volunteer engagement to manage logistics. Coordinating pick-ups, managing app interfaces, and ensuring timely distributions can be time-consuming and demanding. This places a considerable strain on volunteers, leading to burnout and highlighting the unsustainable nature of depending heavily on unpaid labour to address food insecurity (Key informant 3, 14, 2024).

Another issue is the inequity that has developed among organisations because of the apps' functions. Larger charities often benefit more from digital platforms due to their greater resources and capacity to handle the demands of these systems. Smaller food banks struggle to gain access to sufficient supplies of food on the apps, as the apps have a system of prioritisation that alerts organisations based on frequency of pick-ups and the amount of food picked up, which inadvertently prioritises larger organisations with more volunteer capacity. This creates barriers for smaller entities and fosters unhealthy competition for donations (Key informant 14, 2024).

Cultural appropriateness and limited choice present further challenges. Relying on the mobilisation of food surplus to supply food banks and shares often fails to take into account the diverse cultural and dietary needs of recipients. Food redistributed through these platforms may not include sufficient halal options or other culturally specific foods, resulting in a one-size-fits-all approach that does not meet a community's needs (Key informant 14, 2024; Observation O3 and O4, 2024). The importance of providing culturally appropriate food, which is essential for respecting recipients' dignity and preferences (Manchester Food Board, 2011; House et al., 2024) is thus overlooked and neglected.

This issue may be exacerbated by food apps like FareShare Go and Neighbourly,

which facilitate surplus redistribution but are structured in ways that appear to benefit larger retailers over smaller, independent stores or market stalls. Bigger retailers, operating at scale with dedicated resources, are often better equipped to meet the logistical demands of these apps, enabling their participation. Conversely, smaller businesses, such as mom-and-pop stores or local markets, often lack the infrastructure, consistent surplus, or digital systems required to integrate effectively with these platforms. This dynamic may limit the variety and diversity of foods entering the supply chain, particularly culturally appropriate or niche items that smaller businesses and markets are more likely to provide.

While digitalisation can enhance efficiency and reduce waste, it may inadvertently reflect or reinforce disparities in food supply and availability.

Interviews with those engaged with food apps suggest that the role of corporate interests must be considered further. Supermarkets and large retailers benefit from donating surplus food by enhancing their public image and avoiding the cost of waste disposal (Key informant 3, 2024). While they gain positive publicity and financial advantages, the operational burden falls on charities and volunteers who are 'doing the heavy lifting' without much support or recognition (Key informant 3, 2024). This dynamic contributes to what Riches (2018) describes as the 'Hunger Industrial Complex', where charitable responses to food insecurity allow corporations to sidestep addressing systemic issues like overproduction and waste, and to save on the costs of labour, petrol, and processing of waste (Key informant 3, 2024).

While digital tools used by food banks and food shares can enhance the provision of food to those in need by increasing the efficiency of logistics around food surplus and charitable responses, they also risk creating an imbalanced reliance on food waste to address food insecurity. These tools reinforce existing power dynamics, with businesses benefiting economically and reputationally, while volunteers shoulder the operational burdens. Smaller food banks often struggle to navigate or access these digital systems, further entrenching inequalities within the charitable food sector. Additionally, the specific needs of recipients, particularly concerning cultural and dietary preferences, are frequently overlooked through a design that does not prioritise these needs. This approach shifts responsibility for addressing food insecurity away from systemic solutions and state intervention, instead increasing reliance on charitable responses. Such practices align with neoliberal ideologies, prioritising market-driven approaches over addressing the root causes of food insecurity.

4.3 Healthy Start and other 'healthy' food vouchers

The Healthy Start scheme provides targeted nutritional support for low-income pregnant women and families with young children across England, Wales, and Northern Ireland. Initially launched in 2006 as a paper voucher, the scheme was digitalised in 2021. From 2021, eligible recipients receive a prepaid digital card that is funded every four weeks to purchase essential healthy foods, including fruits, vegetables, dairy, and infant formula, at grocery retailers like Sainsbury's and Tesco. The weekly allowance varies based on circumstances: £4.25 each for pregnant women and children aged 1 to 4, and £8.50 for babies up to the age of one. Recipients can also access free vitamins through the scheme, and funds received do not impact other benefit entitlements. With funds being dispersed though a prepaid Mastercard, the scheme is meant to be easily accessed at retailers that have card payment capabilities (Fothergill, 2022; NHS, 2024). Paper vouchers for Healthy Start were no longer issued after March 2022 (Fothergill, 2022; NHS, 2024).

Stakeholders in this digital transition of Healthy Start include the National Health Service (NHS) and government departments, such as NHS Business Services Authority (NHSBSA), overseeing the management and funding the schemes; businesses providing card payment services, such as Mastercard; eligible recipients – pregnant women and families; retailers that accept Healthy Start cards, that is, those with card payment capabilities allowing chip and PIN or contactless payments (NHSBSA, 2024). Frontline workers, such as midwives, advice services, community workers, and others support applications, and charities and advocacy groups help to promote uptake and provide feedback (Key informant 2, 2024).

The transition from paper vouchers to a digital prepaid card aimed to reduce stigma and improve usability, allowing recipients to purchase healthy foods more discreetly and conveniently (Spelling, 2021). However, a few challenges have emerged.

One challenge is that the scheme's eligibility criteria differ from those for other benefits like Universal Credit, as it is not restricted by policies such as the two-child cap (Working Families, 2024; Key Informant 2, 9, 2024). This inconsistency contributes to confusion, with many families unaware they are eligible. Adding to these challenges, eligible families with limited digital skills or internet access often struggle with the online application process, and language barriers create additional obstacles (Hearn, 2022). While the transition to a digital payment card has improved flexibility for some users, many families need hands-on support to apply (Barrett et al., 2024; Key Informant 2, 2024; Hearn, 2022). To this point, the lack of sufficient stakeholder engagement was

cited as exacerbating issues (Defeyter et al., 2022). Healthcare professionals, who play a vital role in supporting applications and informing eligible families, were not sufficiently informed about the changes (Defeyter et al., 2022). This communication gap meant that charities and advocacy groups have had to step in to raise awareness and assist families, placing additional burdens on these organisations (Key informant 2, 2024).

Beyond transition onto the scheme and uptake, key obstacles were reported for recipients during use of scheme. For a digitalisation scheme that was meant to reduce stigma and increase usability for claimants, more attention could have been paid to user journeys³ in the scheme. Difficulties using the prepaid cards at checkouts were cited, with families often having to split eligible items from other purchases and facing frequent card declines at tills, leaving families embarrassed, anxious, and sometimes unable to obtain essential food items (Defeyter et al., 2022; Quinn, 2022). Retail staff were reported to lack proper training on how to process the cards, leading to confusion and frustration at points of sale. Additionally, the transition was marked by a surge in demand for support from the Healthy Start helpline, yet one-fifth of all calls in January 2022 went unanswered, leaving families without help during a critical period (Defeyter et al., 2022).

Businesses also struggle with the digitalisation of the scheme. The exclusion of smaller retailers presents a critical problem. The digital prepaid card system tends to favour businesses with capacity to take card payments, limiting options for families who prefer, or rely on, local shops and fruit and vegetable stands, which often find using these systems too costly to implement. These local retailers may not be part of the scheme, preventing recipients from purchasing culturally specific foods that are integral to their diets (Key informant 6, 2024). This lack of accessibility and cultural appropriateness neglects the diverse needs of the community and can diminish the effectiveness of the support provided (Ranta et al., 2024). Bigger retailers, that used to make top-up contributions to the paper vouchers, enabling families to buy more food, struggled to add value to the digital voucher due to system incompatibilities (Key informant 15, 2024)

Advocacy groups like Sustain and the Food Foundation have recommended various interventions to address these issues. Their recommendations include continued publication of correct data on scheme uptake, rejections, and digitalisation progress; investigating and resolving ongoing technical issues; moving the Healthy Start helplines to free 0800 numbers; and launching a £5 million promotional campaign to increase awareness. Additionally, advocates

³ 'User journeys' refers to the step-by-step paths that users take to interact with a product, service, or system to achieve a specific goal. These journeys map out the series of touchpoints and actions a user experiences, from the initial interaction to the final outcome, while identifying any pain points or obstacles along the way. A user journey typically includes the user's motivations, needs, and emotions at each stage, helping designers and developers create more intuitive and user-friendly experiences by addressing barriers (Kaplan, 2023).

argue that an 'opt-out' registration system through auto-enrolment could alleviate some of these issues. Auto-enrolment would allow eligible families to be automatically registered, ensuring that more families access the scheme (Sustain, 2022; Food Foundation, 2023b). This would require the scheme to be aligned with UC, and streamlining processes for recipients. However, such an approach would also require prioritisation of necessary data sharing between NHSBSA, the Department of Health and Social Care (DHSC), and the DWP.

Alternative models, such as local community food voucher programmes like the Alexandra Rose Voucher scheme, aim to provide greater flexibility and cultural sensitivity compared to national-level food assistance schemes. These programmes offer low-income families vouchers specifically for purchasing fresh fruits and vegetables from local markets, enabling access to culturally appropriate foods that may not be available through mainstream retail outlets. This approach aims to cater to diverse dietary needs and preferences while supporting local food systems. Those at the Alexandra Rose Charity have expressed caution about digitalising its operations, raising concerns that doing so might compromise its ability to respond effectively to the specific needs and preferences of its users (Key informant 6, 2024).

In conclusion, while the digitalisation of the Healthy Start scheme aims to improve food security by ensuring ease of access and usability for recipients, the challenges highlighted in signing up for and using the scheme indicate significant room for improvement. Issues such as low uptake, accessibility barriers, technical difficulties, and the lack of alignment with community needs underscore the need for a more user-centred approach. Further research is essential to better understand the user-experience⁴ considerations that went into the digitalisation of the scheme. This will be explored in greater depth during the second phase of fieldwork.

⁴ 'User experience' (UX) refers to the overall experience a person has when interacting with a product, system, or service, particularly in terms of how user-friendly, efficient, and satisfying the interaction is. It encompasses various elements, including usability, accessibility, design, functionality, and the emotional response elicited from the user during their interaction. UX design aims to create products that provide meaningful and relevant experiences by addressing the needs, preferences, and limitations of users (Aldrees and Gracanin, 2023)

4.4 Cashless free school meals and school holiday digital food vouchers

Various schools across the UK have introduced cashless systems for free school meals (FSM) with the aim of streamlining the process and reducing stigma associated with receiving free meals (Department for Education, 2020; Connolly et al., 2023). Digital practices in this context include online application portals for parents to apply for FSM, cashless payment systems using cards or biometric systems for discreet meal access, and the provision of digital vouchers during school closures or holidays, redeemable at supermarkets (Mospan and Sysoieva, 2022; Key Informant 5, 2024). These initiatives are designed to improve efficiency, enhance privacy for students, and provide greater flexibility for families.

Stakeholders involved in these digital initiatives encompass the Department for Education, which is responsible for policy and funding; schools implementing the cashless systems; students and parents who are the users of FSM; technology and financial services providers supplying the cashless systems (such as ParentPay); supermarkets that accept digital school food vouchers; and local authorities that support families with applications (Key informant 5, 2024).

The digitalisation of FSM offers significant potential to streamline processes and reduce stigma, but there are areas requiring further attention. For instance, families without reliable internet access or adequate digital skills may encounter challenges in applying for and managing FSM (Key informant 5, 2024). Some parents struggle with online forms due to language barriers or lack of devices, which may increase their reliance on schools or community support workers and risk eligible families missing out on critical support.

The cashless systems aim to reduce stigma by providing discreet access to meals, yet disparities can still arise. System errors or flagged insufficient funds at the point of sale may cause embarrassment for students, and differences in how students use the systems may inadvertently single out those receiving FSM (O'Connell and Brannen, 2021b; Key Informant 8, 2024).

Another issue worth addressing with regard to digitalisation in FSM is the debate on auto-enrolment to improve FSM uptake and its associated benefits. Auto-enrolment, which would automatically identify and register eligible children for FSM, could significantly reduce barriers to access, such as the challenges of navigating online application systems (CPAG, 2024a). This approach has been discussed in relation to other schemes, like Healthy Start, and is particularly relevant for FSM as it would ensure that schools can maximise funding for the pupil premium, which is directly linked to FSM enrolment (Department for

Education, 2024b). The pupil premium provides critical additional resources for schools to support disadvantaged pupils, further underlining the importance of boosting FSM uptake (Department for Education, 2020, 2024a).

The absence of auto-enrolment is concerning as dinner money debt is a growing issue in UK schools. For children whose families struggle to pay for meals, this debt can accumulate, creating financial strain for both families and schools (CPAG, 2024b) Related to this point is the limited usability of digital vouchers during school holidays. They are often redeemable only at major supermarkets and this restriction may reduce families' choices, particularly for those who prefer or rely on local shops for culturally specific foods that are not always available in larger chains (Key informant 6, 2024).

Finally, concerns around data access and privacy have been raised in relation to major dinner money management companies. Schools and parents have questioned the extent of data collected and how it is used, highlighting the need for stricter data governance and transparency (Levy, 2020; Johnson and Stone, 2023). In summary, the digitalisation of FSM represents a promising step toward enhancing efficiency and reducing stigma. However, challenges such as digital exclusion, privacy concerns, and limited inclusivity highlight the need for ongoing assessments. Further research and stakeholder engagement will be essential to understand if the digital processes fully meet the diverse needs of families and students while achieving the intended benefits.

4.5 Aspen card for asylum seekers

The Aspen card is a prepaid debit card system introduced by the Home Office in the UK to provide financial support to asylum seekers during their application process. The card provides limited financial support to asylum seekers based on their eligibility under Section 95 or Section 4 support categories.⁵ In 2024, Section 95 support offered £49.18 per week for destitute asylum seekers awaiting a decision, while Section 4 support provided £35.39 weekly to those whose claims have been refused but who cannot leave the UK or who are appealing their decision (Migrant Help, 2024). In comparison, UC provides a significantly higher allowance, with a single adult over 25 receiving £85.14 weekly (DWP, 2024c). The Section 4 amount is not enough for transport, internet connection or other basic needs like food (Jaspars, 2021).

⁵ For more information see: <u>https://www.nrpfnetwork.org.uk/information-and-resources/rights-and-entitlements/support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support/section-95-asylum-support-options-for-people-with-nrpf/home-office-support-options-for-people-with-nrpf/</u>

The Aspen card also imposes restrictions on how funds can be used. Section 95 recipients can make in-person purchases at UK retailers and withdraw up to £300 per week from ATMs, whereas Section 4 recipients face stricter limits: their card can only be used for in-person retail purchases with no option for ATM withdrawals, online transactions, or foreign use. These limitations make the Aspen card more restrictive than UC, which provides beneficiaries with more flexible financial access (Migrant Help, 2024). Additionally, the Home Office has the capability to monitor users' spending patterns and locations through the card's usage (Status Now, 2021; Privacy International, 2021).

Stakeholders involved include the Home Office, which administers the Aspen card system; asylum seekers who are the recipients of the card; service providers and organisations supporting asylum seekers; Visa, which provides the prepaid card system; and advocacy groups highlighting issues and campaigning for change (Home Office, 1998; Privacy International, 2019, 2021).

Several issues have emerged regarding the Aspen card system. One of the most pressing concerns is the surveillance and invasion of privacy (Privacy International, 2019; Asylum and Refugee Network, 2021). The monitoring of spending infringes on personal privacy, leading asylum seekers to feel that every aspect of their lives is being controlled. Punitive actions have been reported, where support is withdrawn based on spending without clear guidelines or transparency. This level of control exacerbates the vulnerability of asylum seekers and raises ethical questions about the surveillance capacity of the card (Bennani-Taylor and Meer, 2024).

Moreover, the Aspen card is seen as part of a broader strategy to deter asylum seekers, reflecting the UK's 'hostile environment' policy towards migrants (Bennani-Taylor and Meer, 2024). The psychological impact of such measures adds to the stress and uncertainty faced by asylum seekers (Key informant 1, 17, 2024; Observation O3, 2024), and the card becomes a manifestation of systemic barriers designed to make the asylum process more arduous (Scottish Refugee Council, 2021).

Analysing these critiques reveals that, while the Aspen card system is intended to provide a financial support during the asylum process, there is fear that it functions more as a mechanism of control and surveillance, exacerbating the vulnerabilities of asylum seekers. The Home Office holds significant power over asylum seekers, with limited accountability or transparency. The lack of engagement with stakeholders, particularly with asylum seekers and support organisations, bring a risk that the system will both fail to meet basic needs and undermine human rights.

4.6 Section conclusion

Reflecting on Universal Credit as the starting point of our exploration of digitalised food assistance in the UK, and moving on to other digital practices, a similar pattern of issues emerges. Across these digitalised practices, we can see that administrative complexity, automated procedures, and lack of support for addressing issues that arise exacerbate existing challenges of food assistance and other welfare services. Our interviews with users, charity representatives, and digital support services all provided evidence that claimants require external assistance to use these digital systems, because official support is inadequate. Claimants come to rely on local supports external to the digitalising or digitalised service. This situation places undue burdens on both claimants and support organisations. These patterns point to potential areas for policy intervention and further research for the second phase.

5. EMERGING THEMES AND ISSUES

As we are beginning to see, the digitalisation of food assistance practices in the UK represents a significant shift in the mechanisms of welfare provision. While digital tools have the potential to streamline processes and enhance efficiency, the historical context and governing rationale that has driven digitalisation thus far has not always allowed these opportunities to be realised for all users.

This section presents the emerging themes on the impact that digitalising food assistance practices have on food security in the UK. Drawing on interviews with key stakeholders and observations conducted between January and April 2024 (see Appendices for details), the analysis explores how digitalisation intersects with issues of power, inequality, and access to food.

5.1 Digital design and user exclusions

The literature and interviews reveal how digital welfare systems like UC and digital food vouchers, such as Healthy Start, often exclude vulnerable populations

due to requirements for digital literacy and internet access (Park and Humphry, 2019; Schou and Pors, 2019; Holmes and Burgess, 2022). These barriers create significant obstacles to accessing essential services. For example, experts and advocates of digitalised schemes like Healthy Start note that many families remain unaware of specific features, such as the ability to register multiple children on the same card. Additionally, confusion around what Healthy Start covers and its connection to other welfare benefits leads some families to feel the scheme may not be relevant to their needs (Key informant 2, 9, 2024).

It is worth noting that the UK's digitalisation strategy is meant to place significant emphasis on service design, with a focus on user experience (UX) and user journeys, so as to integrate these elements through a commitment to agile development methodologies. The Government Digital Service (GDS) has established design principles that prioritise user needs, ensuring that digital services are intuitive and accessible. Agile development practices are central to this approach, promoting iterative design and continuous user feedback to refine services effectively. This methodology enables the government to adapt swiftly to user requirements and technological advancements, thereby enhancing the overall user experience. The UK government has stated its aim is to deliver public services that are both efficient and user-centric as a part of its digitalisation strategy, embedding UX considerations and agile practices into its digitalisation efforts (CDDO, 2023).

The persistent shortfall in inclusive usability, such as language and literacy barriers or complicated navigation structures of digitalised services, raises questions about why, despite well-researched awareness and development procedures being in place to address digital barriers, digital delivery remains inadequately tailored to the needs of its marginalised recipients. In contrast, the success of Scotland's equivalent scheme to Healthy Start, Best Start Foods, illustrates the impact of accessible digital service design on inclusion and access. Best Start Foods utilises an auto-enrolment system, enabling eligible families to bypass complex online applications and eligibility verification. This service design choice has led to an impressive 92% uptake rate (CDDO, 2023). Current data for England and Wales is unknown due to government data issues (Hansard HCWS242, 2024), however, this comparison suggests that better digital service design can mitigate barriers, demonstrating that design choices in digital delivery are critical for equitable access to welfare benefits.

The marked difference between Scotland's successful auto-enrolment and England's more complex system raises questions about the broader functions of digital welfare systems. Healthy Start's current enrolment structure invites critical examination: is digitalisation in aimed at inclusivity, or does it serve as a cost-cutting measure that risks excluding the most vulnerable?

Sustain's data on unclaimed funds lends weight to the latter hypothesis (Sustain,

2023). The disparities create a 'postcode lottery', with historically underserved and marginalised geographies and populations continuing to be excluded. For example Birmingham misses out on £1.6 million annually, while Newham in London sees uptake as low as 50%, equating to £636,898.60 in unclaimed support (Institute of Health Visiting, 2024). Although the government data is currently up for review, but the differences in this 'postcode lottery' is still likely to exist.

5.2 Brokering and the burden of digitalisation on nonstate support and volunteers

For marginalised populations inadequately considered in the digital design of services and its implementation, and facing barriers to digital access, intermediaries – or 'brokers' – are essential in navigating increasingly digitalised welfare systems. Community resources such as libraries, charities, and local organisations act as crucial connectors, offering support to individuals who might otherwise struggle to access necessary services independently. Asylum seekers, for instance, often lack internet access and digital skills, making these intermediaries indispensable for engaging with welfare services (Key informants 1, 14, 17, 19, 2024). This dependency on third-party assistance reflects structural gaps within the welfare system, where non-state actors are increasingly responsible for bridging accessibility gaps in essential services.

As observed, however, in community spaces like food banks and libraries, the role of brokers is complex and challenging (Observations O1, O2, O3, O4, 2024). These intermediaries often face the difficult balance between offering immediate support and attempting to build the digital skills of users for future self-sufficiency (Key informant 17, 2024). While some users can eventually learn to manage platforms like Universal Credit independently, the daily challenges and vulnerabilities of these groups make it difficult for brokers to foster digital self-sufficiency consistently. As a result, intermediaries bear much of the responsibility for providing digital access, a burden that falls heavily on community organisations and charities operating on limited budgets and volunteer resources.

This reliance on brokers exposes significant policy shortcomings. The state's push toward digitalisation often overlooks the reality that marginal populations need better tailored digital design and support beyond the digital infrastructure.. They require robust support systems to effectively engage with their need to use these platforms to access basic needs. This reliance on intermediaries highlights broader political economy issues, reflecting a shift in welfare responsibility from

the state to non-state actors. The resulting dependency on charitable organisations and community initiatives creates a fragmented and inconsistent support network, deepening inequity across regions and communities.

Furthermore, digital food assistance programmes and other welfare services heavily depend on volunteer labour to function effectively, as many brokers and brokering organisations are either volunteers themselves, or reliant on them to engage at the frontline of digital support work for marginalised users (Key informants 3, 7, 14, 16, 17; Observations O2, O3, O4, 2024). This reliance raises ethical questions about the sustainability and fairness of a strategy of service digitalisation that needs volunteers in order to run.

In the UK's food assistance landscape, activities ranging from helping people to fill out online application forms for food assistance schemes to the collection, delivery, packing, and distribution of goods gained from food surplus, run on volunteer labour (Key informants 1, 2, 3, 7, 14, 16, 17; Observations O1, O2, O3, O4, 2024).

From a political economy perspective, this growth and over-reliance on brokers to fill the gaps created by inadequate digital service designs in digitalising food assistance practices point to digital systems that leverage altruism to lower costs, transferring responsibility from the state and corporate actors to the voluntary sector.

5.3 Data sharing and surveillance: opportunities and fears

Phase 1 also revealed some limited but emerging concerns regarding privacy and the transparency of inter-departmental and public-private data exchanges for digitalising food assistance practices. In systems utilising public-private partnerships, the sharing of beneficiary data across agencies and with private entities is often a double-edged sword. On the one hand, digital referrals and streamlined data collection can facilitate efficient operations and potentially enhance access by simplifying processes for eligible individuals (Key informant 2, 15, 2024). On the other hand, however, these efficiencies come with perceived and actual risks, especially for populations that already harbour mistrust toward government systems due to concerns over privacy and surveillance (Dencik et al., 2018; Asylum and Refugee Network, 2021).

One notable example involved a retailer participating in the Healthy Start scheme, where a supermarket executive shared that outreach efforts were hindered by limitations on data sharing. Despite intentions to promote the scheme to eligible families, data interoperability issues prevented the retailer from effectively identifying and contacting the individuals who would benefit most. The executive described the setback, explaining that the promotion had to be abandoned as 'we couldn't reach the families that needed help the most because we didn't have the data' (Key informant 15, 2024).

The digitalisation of welfare practices also enables unprecedented abilities to influence beneficiary behaviour. The Aspen card, a tool for asylum seeker support, allows the Home Office to monitor transactions closely, scrutinising spending against unspecified standards (Asylum and Refugee Network, 2021). This practice exerts a behavioural influence on recipients, creating a persistent concern that any purchase could potentially be scrutinised. The surveillance enabled by the Aspen card not only fosters anxiety but also limits agency, restricting asylum seekers' mobility and reinforcing dependency. Such levels of scrutiny reflect the UK's broader 'hostile environment' policy, where welfare entitlements are contingent upon compliance with strict monitoring measures, often infringing on the social and cultural rights of recipients (Privacy International, 2019, 2021).

This challenge underscores the critical balance required between respecting privacy and ensuring the efficient functioning of digital welfare systems. Currently, the lack of cross-departmental coordination and clear data-sharing frameworks restricts the ability of welfare schemes to maximise their reach and impact. However, the fear of punitive repercussions around that level of interoperability is evident in public discourse surrounding these measures, especially in the contexts of cost-cutting rationales driving digital welfare reforms (Dwyer, 2018; Wright and Dwyer, 2022; Booth, 2023; NSUN, 2024).

5.4 Financialisaton and capital accumulation in digitalising practices

Emerging data reveals how the digitalisation of food assistance practices, particularly through prepaid cards, introduces a profit-driven element into welfare provisioning. Major corporations, such as Mastercard, Soldo, and others capitalise on their role in administering these services. Publications from Mastercard highlight their long-standing recognition of the profit potential in government benefit schemes, evident in the fact that, as of 2024, all prepaid cards used for food assistance and welfare in the UK are Mastercard (Mastercard, 2012, 2019).

This consolidation underscores the financialisaton of welfare, where the private sector increasingly captures value from the provision of essential social services.

The impact of digitalisation on welfare distribution appears to concentrate economic benefit among larger retailers, with programmes like Healthy Start often pushing recipients toward supermarkets and bigger retailers that can absorb the overhead costs of card transactions. Smaller community shops are generally less equipped to participate in these digital schemes, thereby concentrating profits within larger businesses (Key informant 6, 11, 2024). This pattern illustrates how digitalised welfare systems can become a centralising force, funnelling public funds through systems that inherently favour larger corporations over local businesses and community economies.

A similar pattern emerges in digital food redistribution apps, where larger food banks and food share schemes with more resources, such as greater volunteer capacity, are better positioned to form partnerships with major retailers. This set-up, as one food bank participant noted, creates a competitive disadvantage for smaller food banks that lack the logistical resources needed to maintain these relationships (Key informant 14, 2024). Consequently, these partnerships skew support toward corporations and larger non-profit organisations, marginalising smaller, community-based initiatives that may be more attuned to local needs. These dynamics suggest that digitalisation and privatisation in welfare provision can, paradoxically in relation to their stated aims, reduce local accessibility while enhancing corporate profit, raising questions about the broader implications for community resilience and economic equity.

5.5 Invisibility

Finally, digital welfare systems often eliminate the social interactions traditionally associated with in-person welfare support, potentially leading to isolation for recipients (Key informant 2, 3, 6, 2024). A volunteer at a food bank noted that while digital vouchers reduce the need for in-person visits, as they can be sent to recipients online, they can inadvertently isolate recipients who miss out on the communal support typically available in a face-to-face setting (Key informant 16, 2024). The shift to digital assistance thus risks obscuring the social dimension of welfare by cutting off opportunities for recipients to engage with community networks and access social and emotional support, particularly around food – a resource often tied to social connection and community.

This phenomenon of 'invisibility' parallels findings in other contexts, such

as Japan, where digital frameworks for migrant labour management restrict interactions to isolated, technology-mediated exchanges, making workers less visible within the social fabric (Lukács, 2020). The result is a further layer of isolation, depriving vulnerable populations of both practical and emotional networks essential for their well-being (Observation O3, 2024)

6. CONCLUSION

In this first phase of research, we have gained valuable insights into the digitalisation of food assistance in the UK, focusing on its motivating rationales and the range of practices and stakeholders involved. Our research thus far reveals that all the food assistance practices in the UK we have analysed and observed incorporate some element of digitalisation. However, a recurring gap persists between the aims of digitalisation – efficiency and cost savings – and the practical realities of meeting the needs of marginalised recipients and the intermediaries who help deliver these services, given that digitalisation has been implemented under the shadow of austerity. This contradiction frames the ways digitalisation of food assistance in the UK has been implemented thus far. As stated, the primary purpose of the paper at this stage is not to inform policy but to outline research lines of inquiry that encourage critical reflection on opportunities for future improvements.

These findings answer some of our core research questions (Q1 and Q2) and reveal important areas for further exploration in Phase 2, specifically concerning digital access, autonomy, privacy, and the shifting role of community networks, user experience, and food security (Q2 and Q3).

Our findings underscore that, while digitalisation is framed around goals of both efficiency and improved service delivery for users, the design may exclude marginalised groups such as low-income families, people with disabilities, single-adult households, asylum seekers, refugees, and ethnic-minorities, and requires a number of frontline workers – some volunteers – to assist with access. Furthermore, the introduction of UC has been associated with an increase in food insecurity – its recipients are among the most food-insecure groups – and this has led to a proliferation of other food assistance initiatives. For these too, digital design issues have led to recipients facing obstacles in access, including challenges with digital literacy, language accessibility, device and connectivity limitations, and rigid documentation requirements. These obstacles are compounded by limitations in designed interfaces, exclusion of smaller vendors, and reliance

on volunteers, highlighting the urgent need for more inclusive digital welfare systems.

In addition, digital food assistance may reinforce structural inequalities. While these systems aim to improve welfare access, the reality is that digitalised food assistance programmes often favour larger retailers and technology firms, leaving smaller community providers at a disadvantage and introducing new complexities for users. The Phase 1 research has also highlighted a significant reliance on brokers and volunteers external to the digitalising service who address shortfalls, with charities, food banks, and local councils taking on critical roles in assisting those who struggle with digital systems, revealing gaps in both policy and support.

These findings also show that digitalisation in food assistance may increase the power of private sector actors while reducing the agency of welfare recipients. The prevalence of surveillance within digital welfare schemes, such as the Aspen card for asylum seekers, introduces risks for marginalised populations and heightens concerns about data privacy and autonomy. Furthermore, financialisaton within digital welfare benefits large firms, as private sector companies like Mastercard and major supermarket chains capture value from these systems, often at the expense of smaller, community-based initiatives.

As we move into Phase 2, several new issues require deeper investigation. We aim to explore how digitalisation affects recipients' financial behaviours, particularly around access to financial services and potential debt. We also plan to engage more extensively with private sector actors to understand how their motivations and influence affect the accessibility and fairness of welfare systems. In addition, we will focus on the practical experiences of digital exclusion and examine how recipients navigate the limited options that these digitalised schemes present.

Appendices – Table of key informants

No.	Date	Sector	Interviewers
Key informant 1	05/12/2023	Recent refugee	TAK
Key informant 2	11/01/2024	Policy advocacy	SJ+IL
Key informant 3	17/01/2024 07/03/2024	Food share	SJ + IL
Key informant 4	19/01/2024	Policy advocacy	SJ+IL
Key informant 5	23/01/2024	Policy advocacy	SJ+IL
Key informant 6	01/02/2024	Community food sector	SJ+IL
Key informant 7	07/02/2024 07/03/2024	Food bank	SJ+IL
Key informant 8	29/02/2024	Academia	SJ+IL
Key informant 9	11/03/2024	Academia	SJ+IL
Key informant 10	14/03/2024	Food share	IL
Key informant 11	21/03/2024	UX research	IL
Key informant 12	21/03/2024	UX research	IL
Key informant 13	27/03/2024	Economic policy	IL
Key informant 14	11/04/2024	Food bank	SJ + IL
Key informant 15	13/05/2024	Business	SJ+IL
Key informant 16	18/05/2024	Food share	IL
Key informant 17	22/05/2024	Academia	IL
Key informant 18	22/05/2024	Academia	IL
Key informant 19	10/06/2024	Digital inclusion support	IL

Table of observations

No.	Date	Туре	Location
01	05/12/2023	Digital inclusion class	Whitechapel
02	19/01/2024	Food bank	Uttlesford
03	23/01/2024	Food share	Burnt Oak
04	01/02/2024	Food share	Hackney

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