Article:
Bennett, Hayley and Meers, Jed orcid.org/0000-0001-7993-3062 (2025) Devolving digitalisation:local government, local welfare and the digital welfare state. Journal of Social Welfare and Family Law. ISSN: 1469-9621

https://doi.org/10.1080/09649069.2025.2530878

JOURNAL OF SOCIAL WELFARE AND FAMILY LAW
https://doi.org/10.1080/09649069.2025.2530878

Routledge
Taylor & Francis Group

OPEN ACCESS Check for updates

Devolving digitalisation: local government, local welfare and the digital welfare state

Hayley Bennett[a] and Jed Meers[b]

[a]School of Social and Political Science, University of Edinburgh, Edinburgh, UK; [b]York Law School, University of York, York, UK

ABSTRACT

There is increasing interest in examining the digital welfare state. To date, much ethical and analytical scrutiny of digital welfare has focused on the large, nation-state level initiatives of digital transformation, with less attention given to what is happening in local government, especially in the UK. This is despite local authorities playing an essential role in citizen-state relations, and their increasing (yet uneven) move towards an 'interface first' governance for the provision of local services. This article has three key purposes. First, to outline the increasing importance of one field of local government activity that raises demands for digitalisation of processes: local welfare (such as discretionary and local welfare assistance). Where local government has the burden for the design and delivery of policy – as with local welfare – this comes with tied responsibility for the design and delivery of digitalisation of these processes. Second, to outline the variations of local welfare administration and reflect on the role of digital interfaces in this context. To do so, we draw on examples from commissioned funding through the UK Ministry of Housing, Communities and local government. Finally, building on the arguments throughout the article, we set out areas for future research in local digital welfare provision.

KEYWORDS

Digital welfare state; local government; local welfare; interface first bureaucracy

Introduction

A turn to the digital as a solution to stubborn social problems dominates global discussions of the future of public administration. There is much investment and interest from gov-tech providers to develop 'innovative' solutions for the delivery of welfare and social security with private providers promoting substantial digital reforms (see for example Renteria 2022, for digital welfare reforms for federal governments in the USA). While advocates see digital welfare as a route to reducing government inefficiencies and harvesting new insights on society and populations, others focus intently on how the digital welfare state – a term that encapsulates the growing use of technology in welfare design and administration (Zouridis *et al.* 2020) – may increase inequalities or embed existing biases, acknowledging that the use of databases, interfaces, data processing, data

CONTACT Hayley Bennett Hayley.Bennett@ed.ac.uk

sharing, alongside advanced technologies such as algorithmic and automated decision-making, artificial intelligence (AI), big data and predictive analytics are not apolitical or simply technical tools. The use of digital tools, such as interfaces and automation processes, not only disrupt administrative processes but also unsettle values underpinning social security eligibility, accessibility and the realisation of social rights. As Raso (2023, pp. 169–170) states, 'instead of state agencies being obligated to "hear" people fully and fairly, or to reach intelligible and justified decisions, interfaces require individuals to continuously demonstrate their eligibility and responsibility as perpetual "applicants" rather than as "rights-holders".' Scholars also identify how the rise of a digital welfare state involves substantial reform to social welfare organisations, including job centres, social security offices and local government departments.

Some consider the UK as an international frontrunner in digital welfare and social security reforms (Griffiths 2024), primarily due to a Department for Work and Pensions (DWP) digital programme over the last decade that has transformed the priorities, practices, and services it provides. This transformation has attracted much international attention including from Philip Alston, the UN Special Rapporteur on extreme poverty and human rights who characterised this shift as 'the British welfare state is gradually disappearing behind a webpage and an algorithm, with significant implications for those living in poverty' (UK Ministry of Housing, Communities and Local Government 2019, p. 13). Such sentiments reflect a burgeoning body of literature into the use of digital technologies in public services. To date, most UK studies focus on large scale national digital reforms to particular social security policies (such as Universal Credit), or to job centre reforms (e.g. see Raso 2023, Griffiths 2024). Little research and debate about digital welfare in the UK considers changes to welfare administration by local government. In part this reflects the highly centralised nature of the British welfare state, where most social insurance and social assistance payments remain within the legislative and administrative control of Westminster and thus the DWP. However, as outlined later in this article, there are devolved and local welfare payments administered throughout the UK by other agencies and 'tiers' of government, such as the Scottish and Welsh governments, the Northern Ireland executive and local authorities. Indeed, there are 317 local authorities in England, 32 in Scotland, 11 NI, and 22 in Wales, each with their own approach and capacity for digital administrative reforms for their administration of localised welfare, managing related social service demands, and improving anti-poverty activities.

In this article we call for a future research agenda focussing specifically on digital reforms in local government's provision of welfare. We argue that a consideration of local welfare and digital transformation is a necessary component of future research into the UK's digital welfare state. The article is structured as follows. First, we outline the scale of digital transformation agendas in the UK. We then demonstrate how local government is involved in social security delivery and outline how this is a neglected research agenda in terms of digital administration. We then draw attention to the challenges that local government faces and existing schemes and initiatives through illustrative examples from the longstanding Local Digital Fund – the UK Ministry of Housing, Communities and local government's funding scheme to support digitalisation across English local authorities. We conclude by suggesting that future research agendas into the digital welfare

state in the UK need to pay much more attention to local government when conceptualising and examining the digital welfare state.

UK digital welfare transformations: two parallel universes?

Digital transformation of the UK public sector has been a political priority for a number of decades, leading to various investment strategies, reform programmes, and government reviews. By 2025 the UK government's 'State of Digital Government' review stated that the UK public sector now 'spends over £26billion annually on digital technology, employs a workforce of nearly 100,000 digital and data professionals, and delivers millions of transactions every day' (UK Government 2025a, p. 1). Social security or welfare services have been the site of much digital welfare experimentation, notably through the introduction of Universal Credit- the main working-age benefit (means-tested social assistance) in the UK, with an initial 'digital by default administration strategy so '90% of claims to be made online' (Etherington 2020, p. 79). According to Bennett *et al.* (2024), after a start-start approach to design and implementation, including different phases involving combinations of out-sourced procurement and in-house capacity development by 2021 the total cost of this flagship and influential digital social security experiment stood at £3.8billion.

Local government forms a significant part of the public sector, 'with £121 billion annual spend and a workforce of 1.18 million – second only to the NHS' (UK Government 2025a). According to Tussell (a company that monitors public contracts and provides a database of UK government tenders, awards, frameworks and spending), local authorities spend approximately £1.8bn per year on technology procurement (Piggott 2021a). Surveys of local government capacity and workforce find approximately 24,750 staff are employed in IT related roles in English local authorities (LGA 2024) and that the most common priority for councils in workforce development was supporting digitalisation and the use of technology (LGA: Local Government Association 2023). However, the Local Government Association has long highlighted inequities in local government digital transformation. In 2025 their report, the 'State of Digital local government' (LGA: local government Association 2025) found a number of structural and historical issues affecting local government, including vendor lock-in, data interoperability, uneven procurement expertise, legal and IT expertise. They argue that technology purchasing is often managed in-house in each local authority leading to concerns over inequalities, fragmentation and barriers to collectively purchasing and bargaining with technology providers or a collective approach to innovative solutions. Their Future Governance Forum calls for structural changes to the management of local government digital procurement and management, including a local government Centre for Digital Technology calling it a '*paradigm shift*' offering a '*devolved operating mode*l' to '*enable engagement, coordination and impact*' alongside the development of regionally based 'Centres for Service Innovation' to reduce duplication across local authorities (Future Governance Forum 2025).

This context of digital transformation in local government matters for how we examine the digital welfare state. We contend that there is a need to better consider the role of local government in the provision of welfare and the use of digital tools to do so, not just central government departments such as the DWP. This is

because the welfare state is fragmented with devolved (see Bennett and Wiggan 2025) and localised (Meers *et al.* 2024) welfare provisions. This includes local government responsibility for administering local welfare assistance, cash transfers and related support services that function as a 'last resort' for families experiencing destitution or acute need leading. According to Bennett *et al.* (2025) examples include, the Household Support Fund and Discretionary Housing Payment budgets, which when combined account for £1 billion of spend each year. The UK Labour government has recently announced in the 2025 Spending Review a continued desire for local government to undertake this role, and combining these schemes into a 'Crisis and Resilience Fund'- a £1 billion per year multi-year funding until the end of 2028–29. There are also additional Local Welfare Assistance including over 3.6 million people who receive Council Tax Support in England alone. Similarly, the Holiday Activities and Food Programme – one of a number of other schemes often conceived as sitting outside of the core 'local welfare' canon – accounts for an additional £200 million each year administered by local authorities who identify recipients in need.

Therefore, local welfare – although patchy and still a small proportion of the overall welfare system – is playing an increasingly important role in many parts of the UK. However, there is substantial variation in local powers and services across the four nations, with local authorities in England having relatively high levels of delivery autonomy (indeed in Northern Ireland local government has practically no responsibility or dedicated resources for local welfare provision and does not administer schemes similar to those mentioned above, they are instead managed by Northern Irish departments). Local authorities adopt varying approaches to administration including eligibility and application processes across the range of local welfare schemes.[1]

These spatial differences in local welfare exist for many reasons. This includes the previous Coalition Government's approach to explicitly rescale some aspects of social security via the Welfare Reform Act (2012). The Act restructured the provision of emergency funding away from the DWP by abolishing Council Tax Benefit and the Discretionary Social Fund, and instead tasked local authorities in England with designing local provisions including Discretionary Housing Payments (that were often used as a response to reduce the hardship people felt from other aspects of welfare reform, such as the Bedroom Tax). Hick (2022) describes these changes as creating 'a new, localised social security terrain' in England that created increased an element of autonomy in local administration and decision-making.

The transfer of powers and responsibilities to subnational actors and some local authorities is set to continue under the Labour government who are committed to increasing mayoral regions in England. In his first week as UK Prime Minister, Keir Starmer promised to devolve power down to local communities and Deputy Prime Minister Angela Raynor announced a 'devolution revolution' (Patrick *et al.* 2024). An English Devolution Bill was included in the 2024 Kings Speech, proposing increased power for local leaders to set agendas for economic growth, transport and employment support. The UK government's new 'Pathways to Work: Reforming Benefits and Support to Get Britain Working' Green Paper articulates an important role and expectation on 'local leadership to tackle economic inactivity by better connecting work, health, and skills support and increasing engagement with that support' (UK Government 2025b). As

such, local government's role in the provision of local welfare (and related services including employment support) is an increasingly important feature of the welfare state, albeit one that is often overlooked in studies of digital welfare.

The local digital welfare state: a neglected issue?

van Toorn *et al.* (2024, p. 508) state that the digital welfare state 'sits at the intersection of two sizeable bodies of social science investigation – digital technologies and social policy/welfare state' (van Toorn *et al.*, 2024, p. 508). However, local government's role in digital welfare in the UK seems to gain little interest from either camp; not featuring as the attention for welfare scholars or, digital public service scholars. Nor, as we outline here, at the third intersection with local government scholars.

First, research into digital welfare in the UK has predominately focussed on developments at the national level, including flagship and often high-profile transformation agendas, such as the the DWP's Universal Credit reforms (including within this Special Issue, see Young *et al.*; Wright *et al.*). Researchers offer comprehensive analysis of algorithmic designs, automated decision-making practices or digital interface design of high-profile national schemes such as UC (Casey 2022, Raso 2023, Bennett *et al.* 2024, Currie and Podoletz 2023, Griffiths 2024, Meers *et al.* 2024). Similarly, international research into digital welfare reforms tends to focus on large scale national-level examples of reforms 'gone wrong', such as the 'Robodebt' scandal where the Australian government sought to recover 'overpayments' made to social security recipients via an Online Compliance Intervention system (see Carney 2018). Based on automated decision-making and data matching algorithms, the Australian federal court subsequently deemed unlawful and approved a government settlement worth $1.8bn paid to approximately 400,000 victims (Henriques-Gomes 2021). A recent special issue in the Journal of Sociology provided a critical analysis of the digital welfare state from a sociological perspective focusing on state relations and power. The collection examines the digital transformation of the welfare state and its administrative-institutional apparatus to consider 'ongoing shifts in the dynamics of political power and the interplay of current struggles, both internal and external to the state, that aim to shape the forms, purposes and content of welfare provision' (van Toorn *et al.* 2024, p. 510). While the special issue strengthens the debates on the digital welfare state, it is notable that considerations of local government rarely feature in the eight articles, excluding Hjelholt (2024) who incorporates reflections on municipal experiences of engaging with national digital strategies.

Alexopoulou's (2025) systematic literature review of digital technologies in the welfare state provides a detailed overview of studies of digital welfare from multiple countries and emphasises key research approaches and ethical issues (including a focus on street-level workers and local practices). However, it does not clearly distinguish between studies of national schemes or municipality/local government digital welfare, nor reflect on key issues that may be unique to local authorities. Indeed, there is a common position in much of the literature Alexopoulou reviews that the term 'digital welfare state' refers to the nation-state, national welfare agencies and policies rather than a more complex multi-agency and multi-level arrangement with distinct experiences for local government. Bennett (2025) partially addressed this issue by conceptualising the welfare state

(and thus digital welfare state) as more complex and calling for a shift from focussing on singular digital developments at the level of the nation-state. Her study of benefit recipients' experiences of interacting with multiple digital interfaces, including local government processes, finds that people needed to interact with different modes of digitalisation simultaneously alongside human and paper-based forms of bureaucracy from multiple agencies each with their own digital transformation agenda. However, local government was not the primary focus of this study, nor was the digital administration and data sharing practices underpinning specific localised welfare schemes considered in detail.

Second, studies of local government digital reforms (not limited to being specifically focussed on local welfare responsibilities) either examine developments and procurement across the sector as a whole, or case studies of how specific local authorities turn to e-government. In many cases attention is given to exploring complexity and how local authorities grapple with digital reforms as organisations who have a multitude of different professional and statutory responsibilities and diverse services to design and deliver. As Hernandez's (2024, p. 1028) literature review of digital transformation at the local level finds, this body of research is characterised by each local authority adopting its own approach and 'applying and using different technologies for different purposes over time' leading to researchers primarily producing descriptive case studies from mainly a public administration perspective. Often research into such practice centres on digital communication and website developments for managing citizen-state relations or focuses on management practices and organisational structural limitations (e.g. Pittaway and Montazemi 2020). We find an increase in such studies examining how local authorities responded to the COVID-19 lockdowns as they increased their digital activities in response to social distancing. Local government digital practices are thus often examined in the context of approaches to crisis management including data sharing and the introduction of new technologies, with scholars offering recommendations to improve and sustain digital technologies (see Gangneux and Joss 2022).

Third, research into local welfare in the UK focuses predominately on mapping spending and responsibilities with little engagement with digital administration. This is not surprising as local welfare is complex and often opaque. Many comprehensive studies emerge from the third sector and think tanks about the scale and nature of localised and discretionary welfare (e.g. Handscomb 2022, Bond and Donovan 2023). Although little attention – if any- is given in these reports and studies to the means of administration and features of digital welfare, such as interface design, data sharing and data use in local policy-making, automated passporting, software usage, or the relationship between human and digital administration.

This is an area that requires greater investigation. While there is relatively little research into digital welfare administration by local authorities in the UK, there are studies of local government or municipal digital initiatives in countries with greater decentralisation in welfare provision. Here we see extensive developments in the use of digital tools by local agencies and concerns over procurement, technical capacity, and ethical use. For example, local government is responsible for detecting welfare fraud in the Netherlands, a country committed to advancing digital welfare delivery of services (for example see the System Risk Indication scandal, Bekker 2021). Regional and local authorities engage in developing and procuring digital tools for welfare administration

and surveillance. Studies demonstrate how some localities (for example, Walcheren and Rotterdam regions see Zajko 2023) have experienced problems with the legality and ethics of their ambitious predictive and data sharing algorithmic techno-systems, highlighting a lack of advanced internal expertise and capacity to understand algorithmic processes and data sharing tools that detected welfare fraud and affected citizens' access to welfare payments.

Similarly, Jørgensen (2021) argues that Denmark has adopted a form of surveillance capitalism through a 'digital by default' approach to public administration at both the national level and via municipalities who are encouraged to develop approaches to processing individualised data to support predictive analytics for decision-makers. Focussing on the Gladsaxe municipality (in the suburbs of Copenhagen), Jørgensen (2021) highlights how the Gladsaxe prediction model sought to flag families to case workers to initiate family investigations and intervention. Using a data driven approach, the municipality sought to identify vulnerable children at an early age at risk (before actual signs of support or special needs) via combining personal sensitive data into a point-based system using particular socio-economic variables (e.g. unemployment) and behaviours (e.g. missing a doctor's appointment). Despite much financial investment and organisational resources, the municipality abandoned the project due to high error rates and concerns over accuracy, value and legality.

Local welfare and digital transformations: the challenge

This lack of attention to digital transformations in this 'local' digital welfare state is all the more acute given that local welfare responsibilities are complex, difficult to administer and often discretionary: features that make them particularly challenging to digitise. There has been a longstanding twin-track approach to localisation in the UK welfare state: the 'administratively easy and uncontentious in most individual cases' entitlements have been increasingly centralised and then digitalised (such as means-tested out-of-work benefits) while the 'administratively difficult and often contentious in individual cases' processes have been increasingly localised (such as homelessness and social care) (Hill 1989, 33–34). Local welfare responsibilities being 'hived-off' from a centralised 'simplified core' leaves designing and administering these more complex, and often politically sensitive, edge cases and discretionary entitlements to the local tier (Eardley and Sainsbury 1993, 466). Grover argues that the devolution of Local Welfare Assistance following the abolition of the centralised Social Fund is part-and-parcel of Hill's long-standing distinction between devolving the 'difficult' and centralising the 'easy' (Grover 2014, 314). The suite of other local welfare programmes outlined above – particularly Council Tax Support, the increasing role of Discretionary Housing Payments, and the Household Support Fund – can be seen as reflecting the same dynamic (Meers 2019).

This has significant implications for the demand for digitalisation in local government. First, these difficult cases are far more complex to administer than simple means-tested entitlement. For example, local welfare schemes often assess expenditure as well as income – particularly when applying for discretionary housing support or local welfare assistance (for challenges to these in the context of affordability assessments, see *Terryann Samuels v Birmingham City Council* [2015] EWCA Civ 1051, where the appellants described the interpretation of the income/expenditure

information by the local authority as 'laughable' (para. 15), or *Khadra Farah v the Mayor and Burgesses of the London Borough of Hillingdon* [2014] EWCA Civ 359, where the local authority asserted that the accommodation was affordable as 'some items in [the claimant's] weekly expenditure [were] exaggerated for a family of 4 with 3 children being under the age of 11' (para. 9)). This kind of 'stricter means test' (see *R (on the application of Carmichael) v Secretary of State for Work and Pensions* [2016] UKSC 58 (para. 77)) leads to complex application forms and decision-maker workflows, with long 'income and expenditure' tables being common across schemes, often coupled with stringent evidential requirements, such as months' worth of bank statements (see Meers 2020, pp. 237–239). The discretionary space afforded to the local level in the design and administration of these schemes can lead to 'information bingeing' in application and review – where processes are designed to capture a broad range of possible relevant information and evidence to demonstrate compliance with law or guidance (Halliday 2004, p. 64), that are turn present additional challenges and barriers to effective digitalisation.

Second, there are significant interoperability challenges both horizontally within authorities themselves and vertically between the local-level and central government. Data-sharing is resource intensive and requires linked systems, yet local welfare responsibilities are often devolved in a fragmented way and without harmonisation between sources of administrative data. For instance, His Majesty's Revenue and Customs (HMRC) shares earnings data with local authorities in England to help with determining and verifying applications for (the locally designed and administered) Council Tax Support, but do not do so for Council Tax collection teams (see HM Revenue & Customs 2016). Here, two teams within the same council – and sometimes the same individual staff members – dealing with the same resident about the same tax, have different levels of access to income data. Likewise, local authorities have routinely called for the routine sharing of Universal Credit claimant data from the DWP to help with the design and targeting of local welfare support – a process due to be piloted by the department in 2026 (UK Parliament 2025). Fragmented access to data creates additional burdens on local authorities tasked with the design and administration of the local welfare schemes, but also negatively impacts the experience of those applying for support, who may need to reproduce evidence or otherwise re-establish their eligibility (see Kuhlmann and Heuberger 2023, p. 152).

Third, local government is in the midst of a pressing – and arguably worsening – financial crisis. Councils remain under significant financial pressure, with increases in spending outpacing revenues and reserves being drawn down (Institute for Fiscal Studies 2024). Hoddinott *et al*'s (2023) research for the Institute for Government identified a £6.2billion funding gap and noted a reduction of over 30% in local government staff from 2011–2023. This has in turn led to re-allocation of resources and a denuding of service provision – local authority functions are operating in a far more resource constrained environment (Arrieta and Davies 2025, p. 15). This leads to a Catch-22 for local government. On the one hand, digitalisation of processes is a key potential driver of efficiencies and therefore savings in expenditure. Indeed, Lowndes and Gardner (2016) suggest that is a longstanding response to what they characterise as the 'devolution/austerity' paradox; that local government can use digitalisation to 'do more with less' (Lowndes & Gardner, 2016, 365). However, on the other hand, digitalisation is heavily

resource intensive. The 'resource base' of local government is a key driver of digital progress, with the financing of projects and the digital skills of existing staff being particular challenges in an environment where the significant upfront capital cost of programmes is difficult to secure (Kuhlmann and Heuberger 2023, p. 152).

Not all local authorities in the UK are experiencing the same financial and organisational pressures; devolved variations affect the financial support and statutory responsibilities underpinning local government digital reforms in different parts of the UK. For example, The Child Poverty (Scotland) Act 2017 legally mandates the Scottish Government to reduce child poverty, sets targets, and makes a requirement for Scottish local authorities to create and implement child poverty action plans and report on child poverty reduction. Additionally, in July of 2024, The UN Convention on the Rights of the Child (UNCRC) was incorporated into Scots law and requires all public authorities – including local authorities and service providers – to act in a way that is compatible with the UNCRC, including the right to an adequate standard of living (Article 27), the right to health (Article 24), the right to education (Article 28), and the right to be heard and taken seriously in decisions affecting them (Article 12). As such, the Scottish Government and Scottish local authorities, Community Planning Partnerships and Health and Social Care Partnerships experiment and invest in various service reforms, including improvement to digital interfaces, data-sharing, and preventative practices.

One form of support for this work is available via the Scottish Government's Child Poverty Practice Accelerator Fund (CPAF) introduced in 2023. CPAF provides funding for local authorities and health boards to reduce child poverty through data-based initiatives and evidence-based practice based on local approaches (see Scottish Government 2025). For example, through this scheme North Ayrshire council has piloted the development of a Single Shared Assessment process and interface to improve customer service interactions and share insights across services to gain a better understanding of applicants who are applying for Free School Meals, School Clothing Grants and accessing Financial Inclusion and Employability services, plus council tax discounts and exemptions. This pilot seeks to also test automation and/or process consolidation, including triggering benefit assessments automatically when a resident applies for one service, and/or for looking at other areas where multiple processes might be consolidated and simplified around consent. Similarly, Aberdeen City Council launched a project called The Low Income Family Tracker platform, (developed by Policy in Practice) that identifies at-risk households to increase the take-up of support, including Free School Meal entitlements and Discretionary Housing Payments. Argyll & Bute council aimed to assess the accuracy and utility of third-party datasets – CACI's Acorn Household and Paycheck Disposable Income – for targeting child poverty interventions to determine whether CACI data could provide reliable, household-level insights to inform welfare rights referrals and local policy decisions. Finally, West Lothian Council (in collaboration with the Improvement Service), are developing and implementing a Child Poverty Data Dashboard.

Taken together – and notwithstanding significant variations in the local government context across the UK – these three challenges provide both significant incentives for local authorities to use digital technology to reform services (to reduce administrative costs and aid the processing of high volumes of difficult cases) and constrains them in doing so (due to limited resources, difficult vertical and horizontal data-sharing

arrangements and complex statutory responsibilities). What emerges is huge variation in digital welfare provision, a challenging environment where innovation is required but resources are constrained, and a sometimes difficult relationship between local and national level digital systems.

Interface-first local welfare: some examples

Given these significant challenges – complex administrative requirements, fragmented data systems, and severe resource constraints – local authorities across the UK are increasingly turning to digital interfaces as one of the tools available in the design and delivery of local welfare provision. This shift towards an 'interface-first' approach reflects the promises and constraints of digitalisation of local welfare services we outline above. To illustrate how local authorities are grappling with these tensions in practice, we explore here three examples drawn from projects funded through the UK Ministry of Housing, Communities and Local Government's Local Digital Fund – a longstanding scheme that provides grants to support collaborative digitalisation projects across English local authorities. Since its establishment, the fund – across six rounds of projects – has supported councils to work together on shared digital challenges, from initial discovery phases through to implementation.

These cases demonstrate three recurring themes in local digital welfare transformation: the challenge of integrating siloed services to reduce burden on citizens; the use of digital interfaces to structure and automate the kinds of complex assessment processes so often devolved to the local level; and the persistent problem of digital exclusion that threatens to undermine the accessibility of 'interface first' local welfare support.

Siloed services and systems: 'tell us once'

Households contact local authorities – or their local authority contacts them – to deal with wide range of services and systems, from council tax or housing to social care and education. This breadth and depth of services is challenging not only from an organisational standpoint given the limited resources at their disposal (see Institute for Fiscal Studies 2024), but also for the effective design and delivery of digital systems. Problems are likely to cut across services. An applicant for local welfare support may also face problems with council tax payments; an individual facing homelessness may also be experiencing a family breakdown. However, citizen interactions with local authority services are often siloed, where problems that might engage multiple departments are separated into individual forms, contact points and interfaces targeted as specific areas of the council. This leads to people having to 'tell and re-tell their story' and 'not know[ing] where to start' or 'who to go to' (Wilson *et al.* 2015, p. 7).

This is a localised version of the integration problems that also characterise 'interface first' digitalisation in central government (Meers *et al.* 2024, pp. 130–131). Local authorities are often 'siloed organisations' with a 'lack of join-up between services' which bleeds into digitalisation processes (Local Digital 2024). Services become disconnected from one another, and 'data silos' – where a risk-averse approach to integration or a lack of resource to effectively manage joined-up data – leads to both 'confused residents' and

digital resources that are 'not used effectively and to their full potential' (Department for Levelling Up, Housing and Communities, 2024, 99).

This problem is reflected in a joint award from the Local Digital Fund to a consortium of five local authorities across England (Sunderland City Council, North East Lincolnshire Council, Kirklees Borough Council, Watford Borough Council, Newcastle City Council) to undertake initial discovery work on a 'Tell Us Once' service (UK Ministry of Housing, Communities and local government 2019). This deals with a deceptively straightforward interface design problem: a household moving into a new local authority area. Moving can involve separately notifying up to six different council departments – council tax, electoral registration, housing benefit, refuse collection, blue badges, and parking permits – providing the same basic information repeatedly across 66 separate data inputs across a range of online interfaces (UK Ministry of Housing, Communities and Local Government 2019). Sunderland City Council estimated that processing time alone these requests amounted to the equivalent of five full-time staff each year and that at least 7.5 million change of addresses are processed across local authorities each year (UK Ministry of Housing, Communities and Local Government 2019).

Even this seemingly simple exercise in co-ordinating services presented significant problems. Creating a single user-interface for new movers would lead to such significant 'cost of integrations' that it would be likely to render any such service 'unaffordable' – constraints on the licencing of existing systems, their 'contract renewal lifecycle', and a lack of resources and capacity to maintain the 'required common data sets' make integration across the six council services challenging and expensive. As the report concludes, 'whilst there is a will to integrate at a political level' these limitations mean it 'may not be possible' (UK Ministry of Housing, Communities and local government 2019).

Structuring data-input: 'automated assessments'

The local design and implementation of interfaces not only significantly affects the citizen experience; by shaping the input and presentation of data, they also affect the exercise of administrative discretion by local authority workers. As Weatherall *et al.* underscore in their recent review of automated decision-making in local government in New South Wales, even simple tools often neglected in studies of automated decision making – such chatbots, guided web-forms or triage systems – can affect the prioritisation of cases or lead to individuals 'missing out' on entitlements (Weatherall *et al.* 2024, 14–15).

Social care is a particularly acute example – in common with many welfare functions served by local authorities, it involves resource-intensive assessments of need under a complex statutory framework and ever-diminishing real-terms budgets. This leads to the field being a site of 'tremendous experimentation' in using technology to reform the interface between citizens and the local authority care system (Johnston and Pratt 2024, p. 8). Indeed, Wright has referred to this as a the 'Alexaification of social care' – here, local authorities increasingly rely on third party platforms and providers to interact with residents with care needs, with local government increasingly serving the role of a developer and data broker (Wright 2021, p. 11).

The Local Digital Fund supported work, led by the Royal Borough of Kingston Upon Thames (alongside London Borough of Redbridge, London Borough of Merton, Royal Borough of Greenwich, West Berkshire Council, Dorset Council and Southwark Council), to explore automating social care triage, assessment and prescription processes (UK Ministry of Housing, Communities and Local Government 2024). The project aims to 'codify a person's care needs' to 'improve a manual, custom, and sometimes out-sourced process that can be inconsistent, slow and delays the delivery of care' (ibid).

As in other areas of an 'interface first' welfare bureaucracy, this automation is not about the behind-the-scenes processing of data – the kinds of technologies characterised by Ulbricht and Yeung as the 'algorithmic factory floor', such as use of algorithms to automatically analyse data inputs and take decisions about individuals with or without a 'human in the loop' (Ulbricht and Yeung 2022, pp. 16–18). It instead focuses on the structuring of data – in this case 'codifying care needs' (UK Ministry of Housing, Communities and Local Government 2024) – using digital interfaces, to triage an individual's case and link it to other local authority services. This is an example of the 'structuring' and 'sorting' functions that so often characterise the role played by user interfaces when they are integrated into welfare processes (see Meers *et al.* 2025, pp. 123–126).

Importantly, even this more modest use of digital technology can have significant effects on the exercise of administrative discretion by front-line workers. Interfaces can replace otherwise face-to-face or telephone encounters with local authority staff, provide standardised templates for processes, enhance the top-down monitoring of staff activity, and though the presentation of and shaping of data, influence decision-making (for a review of the evidence across these dimensions, see Northcott 2025). Indeed, Andersson, Hallin, & Ivory go as far as to argue that local government digital systems could in turn threaten the professional autonomy of front-line staff like social workers (Andersson *et al.* 2022, pp. 8–9).

Digital exclusion: 'exploring barriers to online engagement'

Shifting the access points to online interfaces may bring significant cost savings for local authorities tasked with designing and delivering these local welfare schemes, but they also come with a significant risk of worsening the digital exclusion faced by particular groups. For instance, the Local Digital Fund project lead by South Ribble Borough Council (working alongside Chorley Council and Preston City Council) sets out the challenges facing authorities (UK Ministry of Housing, Communities and Local Government 2024). They make clear the potential savings of shifting face-to-face or telephone interactions online: an average phone call costs the council £2.59, an average face-to-face interaction £8.21, while an interface mediated interaction is just £0.09 (ibid). However – as Chorley Council note – 'all councils face the challenge of encouraging users to transact online' in the face of 'more digital exclusion' (ibid).

Even simple interfaces – such as digital application forms – have in-built expectations of the 'digital literacy' of their users (Abalo 2025, p. 103). This is both in terms of resources (that individuals will have access to the necessary technology to access an online interface, app or platform) and skills (particularly where these interfaces involve affordances that expect digital skills, such as the uploading of evidence in specified file

formats). Interfaces, like the Universal Credit system can often 'shift responsibility for routine administrative work' on citizens accessing the service, requiring the formatting and presentation of evidence, inputting of data in line with pre-determined requirements, or to message officials through constrained interfaces (Ball *et al.* 2023, p. 1176). A seemingly 'technical change to the mode of interaction' between citizens and street-level bureaucrats can therefore have wide-ranger implications for 'how access to social protection is distributed between citizens' (Ball *et al.* 2023, p. 1176. See also Brown's analysis elsewhere in this collection). Albo's work focusing on older citizens demonstrates a similar dynamic of how these expectations often collide with reality (Abalo 2025).

The impacts of digital exclusion can compound where local authorities use single interfaces to mediate access to a whole host of council services. For instance, South Ribble Borough Council's application refers to the 'My Account services' interface used by the Council to access a whole host of services (UK Ministry of Housing, Communities and Local Government 2024). Much like forms of digital identity systems used by Governments across the world (see dos Santos Tavares and Masiero 2023), users struggling to access these systems – because they make lack the necessary evidential requirements or have difficulty with the authentication processes that often accompany them – can be locked out of not just one service, but a number all at once.

This digital exclusion can lead to an increasing role played by family members and the third sector in mediating access to interfaces, helping relatives who may otherwise be digitally excluded from them (Kaun and Liminga 2025). Providing this 'digital access and support' is part-and-parcel of what Edmiston *et al.* have referred to as the 'mediation' within the 'local welfare eco-system' that is increasingly necessary to make and sustain a claim in the digital welfare state (Edmiston *et al.*, 2022). Indeed, interfaces are increasingly being designed for 'vicarious' users of systems – such as online application processes for Attendance Allowance, where a family member or other helper can navigate the interface on behalf of an applicant (Department for Work and Pensions 2025).

Conclusion

This article has argued that the digital welfare state in the UK cannot be fully understood without examining the increasingly important role of local government in designing and delivering local welfare services. While scholarly attention to date has understandably focused on high-profile national transformations (such as the UK's flagship Universal Credit), we have demonstrated that the local government tier is simultaneously developing its own digital welfare infrastructures – often under more challenging conditions, facing the 'administratively difficult' decisions rather than the 'administratively easy' ones (Hill 1989, pp. 33–34, Grover 2014, p. 314) and with more limited resources than their central government counterparts. The examples from projects commissioned by the Local Digital Fund illustrate how local authorities are grappling with fundamental challenges of integration, automation, and digital exclusion, while attempting to deliver increasingly complex local welfare functions with extremely limited resources.

Moving forward, we propose several key areas for a research agenda on this local interface-first welfare state. First, the growing attention to algorithmic and AI-enabled decision-making welfare administration – research that remains vital given the high

stakes involved – should not come at the expense of examining the more mundane but pervasive forms of digitalisation that so often characterise these processes at the local level. The structuring of web forms, the exclusionary potential of authentication systems, and the challenges of data integration may have impacts on welfare access that are as significant and which warrant further attention.

Second, researchers should examine the cumulative effects of multiple digital interfaces on welfare recipients who must navigate both national and local systems – the kind of 'multi-level maze' that Bennett (2025) has begun to explore, which cuts across different tiers of Government. 'Interface first' digital welfare can exacerbate digital exclusion. For instance, the 'tell us one' interface outlined above – this kind of 'one-stop shop' for multiple council services – may serve to reduce administrative burdens on residents. However, it also has the potential to lock out those with low levels of digital literacy and access from multiple services at once.

Third, the role of discretion in digital local welfare demands particular scrutiny. As our examples demonstrate, even seemingly simple interface designs for 'codifying' needs or structuring applications can fundamentally reshape how applicants themselves input data about their needs (for further examples of this, see Meers 2020), but also how front-line workers exercise their professional judgment in the complex cases that form their day-to-day decision-making. These 'interface first' digitalisation processes are not only claimant-facing; staff decision-making is increasingly shaped by similar platforms, apps and services.

Fourth, the political economy of local digital welfare merits investigation. The 'devolution/austerity paradox' identified by Lowndes and Gardner (2016) continues to shape local government's digital ambitions, but we need more nuanced understandings of how resource constraints interact with digital transformation agendas, particularly as new devolution settlements promise to expand local welfare responsibilities to both the local and regional tier. Connected to this, fifth, comparative research across the UK could reveal how different institutional arrangements and policy frameworks shape local digital welfare provision – as the Scottish examples we outline above suggest, variations in statutory duties and funding mechanisms create distinct digitalisation pathways.

Sixth, as the Local Government Association have already flagged (LGA 2024), the fragmentation of procurement of digital welfare tools creates problems for local authorities who are unable to engage in collective purchasing and also ensure their systems are compatible with each other. As local government spends approximately £1.8 billion on technology per year, this context enables a network of private providers offering solutions and products that may fundamentally alter the design of welfare services and interaction between citizens and the state. Such providers include Capita – a substantial outsourcing partner to numerous government departments who is noted as the largest local government tech supplier (Piggott, 2021b). There is a danger that such firms – often invisible to the general public are hugely influential in public purchasing and the development of tech possibilities. Furthermore, increased reliance on outsourcing means they are considered too big to fail (Davies, 2018), especially after the collapse of Carillion in 2017 (see Mor 2018).

The local digital welfare state is an increasingly important component of how citizens experience accessing welfare support in the UK. As local government's welfare

responsibilities continue to expand under new devolution settlements, and as financial pressures intensify demands for digital 'efficiency', the need for sustained scholarly attention to these developments becomes ever more urgent. Only by examining digital welfare across all levels of government can we fully understand its implications for social rights, administrative justice, and the future of the welfare state itself.

Note

1. These variations are examined in the Safety Nets project: https://safetynets.study/.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

Abalo, E., 2025. Digital first or digital only? Swedish welfare user interfaces and the challenges for older citizens. *The Journal of Aging and Social Change*, 15 (1), 99–120. doi:10.18848/2576-5310/CGP/v15i01/99-120.

Alexopoulou, S., 2025. Paradigm shift: exploring the impact of digital technologies on the welfare state through a systematic literature review. *Social Policy & Administration*, 59 (1), 135–157. doi:10.1111/spol.13054.

Andersson, C., Hallin, A., and Ivory, C., 2022. Unpacking the digitalisation of public services: configuring work during automation in local government. *Government Information Quarterly*, 39 (1), 101662. doi:10.1016/j.giq.2021.101662.

Arrieta, T. and Davies, J.S., 2025. Crisis management in English local government: the limits of resilience. *Policy and Politics*, 53 (3), 594–612. doi:10.1332/03055736Y2024D000000029.

Ball, S., *et al.*, 2023. Emerging modes of digitalisation in the delivery of welfare-to-work: implications for street-level discretion. *Social Policy & Administration*, 57 (7), 1166–1180. doi:10.1111/spol.12939.

Bekker, S., 2021. Fundamental rights in digital welfare states: the case of SyRI in the Netherlands. *In*: O. Spijkers, W.G. Werner, and R.A. Wessel, eds. *Netherlands Yearbook of International Law 2019. Netherlands Yearbook of International Law*. Vol. 50. The Hague: T.M.C. Asser Press, 289–307. doi:10.1007/978-94-6265-403-7_24.

Bennett, H., 2025a. Navigating Digital Welfare: A Multi-Level Maze? *Social Policy & Administration*. doi:10.1111/spol.13138.

Bennett, H., *et al.*, 2025b. Local welfare alone can't solve child poverty, but if well-funded it helps LSE blogs, 1.5.25. Available from: https://blogs.lse.ac.uk/politicsandpolicy/local-welfare-alone-cant-solve-child-poverty-but-if-well-funded-it-helps/.

Bennett, H., Currie, M., and Podoletz, L., 2024. Universal Credit: administrative burdens of automated welfare. *Journal of Social Policy*, 1–19. doi:10.1017/S0047279424000175.

Bennett, H. and Wiggan, J., 2025. Building on shaky foundations? multi-level policy realities for Scottish social security policies 24.3.25 blog for centre on constitutional change. Available from: https://www.centreonconstitutionalchange.ac.uk/news-and-opinion/building-shaky-foundations-multi-level-policy-realities-scottish-social-security .

Bond, D. and Donovan, C., 2023. On the Cliff Edge: crisis support 2022/2023. End furniture poverty. Available from: https://endfurniturepoverty.org/wp-content/uploads/2023/11/On-the-Cliff-Edge-The-State-of-Crisis-Support-2022-23-Final1.pdf .

Carney, T., 2018. Robo-debt illegality: the seven veils of failed guarantees of the rule of law? *Alternative Law Journal*, 44 (1), 4–10. doi:10.1177/1037969X18815913.

Casey, S., 2022. Towards digital dole parole: a review of digital Self[1]Service initiatives in Australian employment services. *The Australian Journal of Social Issues*, 57 (1), 111–124.
Currie, M. and Podoletz, L., 2023. Emotions and dynamic assemblages: a study of automated social security using qualitative longitudinal research. *In: Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency*, 1101–1111.
Department for Work and Pensions, 2025. Attendance allowance prototype. Available from: https://github.com/dwp/attendance-allowance-prototype.
dos Santos Tavares, A.P. and Masiero, S. (2023) Digital identity and social protection programs: leaving no one behind? *ECIS 2023 Research-in-Progress Papers*. Available at: https://aisel.aisnet.org/ecis2023_rip/61/ .
Eardley, T. and Sainsbury, R., 1993. Managing appeals: the control of housing benefit internal reviews by local authority officers. *Journal of Social Policy*, 22 (4), 461–485. doi:10.1017/S0047279400021000.
Edmiston, D., *et al.*, 2022. Mediating the claim? How 'local ecosystems of support' shape the operation and experience of UK social security. *Social Policy & Administration*, 56 (5), 775–790.
Etherington, D., 2020. *Austerity, welfare and work: exploring politics, geographies and inequalities*. 1st ed. Bristol University Press.
Future Governance Forum, 2025. 'Time for a local government digital revolution' 26.3.25. Accessed online 30.6.5. Available from: https://www.futuregovernanceforum.co.uk/news/time-for-a-local-government-digital-revolution/.
Gangneux, J. and Joss, S., 2022. Crisis as driver of digital transformation? Scottish local governments' response to COVID-19. *Data & Policy*, 4, 26. doi:10.1017/dap.2022.18.
Gasco Hernandez, M., 2024. Reflections on three decades of digital transformation in local governments. *Local Government Studies*, 50 (6), 1028–1040. doi:10.1080/03003930.2024.2410830.
Griffiths, R., 2024. Universal Credit and automated decision making: a case of the digital tail wagging the policy dog? *Social Policy & Society*, 23 (1), 1–18. doi:10.1017/S1474746421000749 .
Grover, C., 2014. From the social fund to local welfare assistance: central–local government relations and 'special expenses'. *Public Policy and Administration*, 29 (4), 313–330. doi:10.1177/0952076714529140.
Halliday, S., 2004. *Judicial review and compliance with administrative law*. Oxford: Hart Publishing.
Handscomb, K., 2022. Sticking plasters. An assessment of discretionary welfare support. October 2022, resolution foundation. Available from: https://www.resolutionfoundation.org/app/uploads/2022/10/Sticking-plasters.pdf .
Henriques-Gomes, L., 11 June 2021. Robodebt: court approves $1.8bn settlement for victims of government's 'shameful' failure. *The Guardian*.
Hick, R., 2022. Austerity, localism, and the possibility of politics: explaining variation in three local social security schemes between elected councils in England. *Sociological Research Online*, 27 (2), 251–272.
Hill, M., 1989. Income maintenance and local government: implementing central control? *Critical Social Policy*, 25, 18–36.
Hjelholt, M.F., 2024. The absorbent digital welfare state: Silencing dissent, steering progress. *Journal of Sociology*, 60 (3), 643–659. doi:10.1177/14407833241253632.
HM Revenue and Customs, 2016. *IDG52910 - information disclosure gateways with other government departments: local authorities: general*. Available at: https://www.gov.uk/hmrc-internal-manuals/information-disclosure-guide/idg52910 Accessed 16 July 2025.
Hoddinott, S., *et al.*, 2023. Fixing public services priorities for the new Labour government. Institute for Government. Available from: https://www.instituteforgovernment.org.uk/sites/default/files/2024-07/Fixing-public-services.pdf Accessed 30 June 2025.
Institute for Fiscal Studies, 2024. Reforming local government funding in England: issues and options. Available from: https://ifs.org.uk/publications/reforming-local-government-funding-england-issues-and-options.

Johnston, C. and Pratt, G., 2024. Automating adult social care in the UK: extracting value from a crisis. *Geoforum*, 151, 103997. doi:10.1016/j.geoforum.2024.103997.

Jørgensen, R.F., 2021. Data and rights in the digital welfare state: the case of Denmark. *Information, Communication & Society*, 26 (1), 123–138. doi:10.1080/1369118X.2021.1934069.

Kaun, A. and Liminga, A., 2025. Welfare service centers: maintenance, repair, and care at the analog interfaces of the digital welfare state. *New Media & Society*, 27 (5), 3039–3054. doi:10.1177/14614448231220362.

Kuhlmann, S. and Heuberger, M., 2021. Digital transformation going local: implementation, impacts and constraints from a German perspective. *Public Money and Management*, 43 (2), 147–155. doi:10.1080/09540962.2021.1939584.

LGA, 2024. Local government capacity survey – it. Available from: https://www.local.gov.uk/sites/default/files/documents/Publication%20report%20-%20Workforce%20Capacity%20survey%20-%20IT%20Capacity%20survey%20-%20final%20V2.pdf .

LGA: local government Association, 19 1 2023. 2022 local government workforce survey. Available from: https://www.local.gov.uk/publications/2022-local-government-workforce-survey.

LGA: local government Association, 21 1 2025. State of digital local government. Available from: https://www.local.gov.uk/publications/state-digital-local-government .

Local Digital, 2024. Future councils pilot report. London: Department for Levelling Up, Housing and Communities. Available at: https://mhclgdigital.blog.gov.uk/wp-content/uploads/sites/222/2024/04/FC-Pilot-Report-2024.pdf [Accessed 16 July 2025].

Lowndes, V. and Gardner, A., 2016. Local governance under the conservatives: super-austerity, devolution and the 'smarter state. *Local Government Studies*, 42 (3), 357–375. doi:10.1080/03003930.2016.1150837.

Meers, J., 2019. Discretion as blame avoidance: passing the buck to local authorities in 'welfare reform'. *Journal of Poverty & Social Justice*, 27 (1), 41–60. doi:10.1332/175982718X15451305440442.

Meers, J., 2020. Forms of fettering: application forms and the exercise of discretion in the welfare state. *Journal of Social Welfare and Family Law*, 42 (2), 221–242. doi:10.1080/09649069.2020.1751936.

Meers, J., *et al.*, 2024. Sticking plaster support: the Household support Fund and localised assistance in the UK welfare state. *Journal of Poverty & Social Justice*, 32 (1), 26–46. doi:10.1332/17598273Y2023D000000008.

Meers, J., Halliday, S., and Tomlinson, J., 2024. An "interface first" bureaucracy: interface design, universal credit and the digital welfare state. *Social Policy & Administration*, 59 (1), 119–134. doi:10.1111/spol.13053.

Mor, F., 2018. Carillion collapse: what went wrong? house of commons library. Available from: https://commonslibrary.parliament.uk/carillion-collapse-what-went-wrong/ .

Northcott, E.W., 2025. Automating street-level discretion: a systematic literature review and research agenda. *Policy Studies Journal*. doi:10.1111/psj.70024.

Patrick, R., *et al.*, 2024. Labour's 'devolution revolution' should build on existing devolved powers LSE blogs 1.8.24. Available from: https://blogs.lse.ac.uk/politicsandpolicy/labours-devolution-revolution-should-build-on-existing-devolved-powers/.

Piggott, J., 2021a. Local government tech procurement: what's the landscape? Web blog 9.12.21. Available from: https://www.tussell.com/insights/tech-procurement-in-local-government-landscape#:~:text=How%20much%20does%20local%20government,West%20Midlands%2Dbased%20local%20authorities Accessed 30 June 2025.

Piggott, J., 2021b. Local government tech procurement: what's the landscape? *Tussell*. Available from: https://www.tussell.com/insights/tech-procurement-in-local-government-landscape.

Pittaway, J. and Montazemi, A.R., 2020. Know-how to lead digital transformation: the case of local governments. *Government Information Quarterly*, 37 (4), 4. doi:10.1016/j.giq.2020.101474.

Raso, J., 2023. Smooth operators, predictable glitches: the interface Governance of benefits and borders. *Canadian Journal of Law and society/La Revue Canadienne Droit Et Société*, 38 (2), 158–179. doi:10.1017/cls.2023.20.

Renteria, A., Apr 2022. A bold plan to transform access to the US social safety net [video]. TED conferences. Available from: https://www.ted.com/talks/amanda_renteria_a_bold_plan_to_transform_access_to_the_us_social_safety_net.

Scottish Government, 23 June 2025. *Evaluation of the child poverty practice accelerator Fund (CPAF): interim report*. Available from: https://www.gov.scot/publications/evaluation-child-poverty-practice-accelerator-fund-cpaf-interim-report/.

UK Government, 21 Jan 2025a. State of digital government review DSIT. Available from: https://www.gov.uk/government/publications/state-of-digital-government-review/state-of-digital-government-review .

UK Government, 2025b. Pathways to work: reforming benefits and support to get Britain working green Paper 18.6.25. Available from: https://www.gov.uk/government/consultations/pathways-to-work-reforming-benefits-and-support-to-get-britain-working-green-paper/pathways-to-work-reforming-benefits-and-support-to-get-britain-working-green-paper . Accessed 30 June 2025.

UK Ministry of Housing, Communities and Local Government, 2019. 'Tell us once' move in process. *Local digital*. Available from: https://www.localdigital.gov.uk/funded-project/tell-us-once-move-in-process/ .

UK Ministry of Housing, Communities and Local Government, 2024. Exploring automated health and social care assessments. *Local digital*. Available from: https://www.localdigital.gov.uk/funded-project/exploring-automated-health-and-social-care-assessments/ .

UK Ministry of Housing, Communities and Local Government, 2024. Exploring barriers to online engagement with council services. *Local digital*. Available from: https://www.localdigital.gov.uk/funded-project/exploring-barriers-to-online-engagement-with-council-services/https://onlinelibrary.wiley.com/doi/10.1111/spol.12803.

UK Parliament, 2025. Universal credit: parliamentary written question answered 8 May 2025, department for work and pensions. Available at: https://www.theyworkforyou.com/wrans/?id=2025-04-30.49522.h.

Ulbricht, L. and Yeung, K., 2022. Algorithmic regulation: a maturing concept for investigating regulation of and through algorithms. *Regulation & Governance*, 16 (1), 3–22. doi:10.1111/rego.12437.

van Toorn, G., Henman, P., and Soldatić, K., 2024. Introduction to the digital welfare state: contestations, considerations and entanglements. *Journal of Sociology*, 60 (3), 507–522. doi:10.1177/14407833241260890.

Weatherall, K., *et al.*, 2024. Automated decision-making in NSW: mapping and analysis of the use of ADM systems by state and local governments. Sydney: ARC Centre of Excellence for Automated Decision-Making and Society. Available at: https://cmsassets.ombo.nsw.gov.au/assets/Reports/Research-Report-ADMS.pdf.

Wilson, S., *et al.*, 2015. Joining up public services around local, citizen needs: perennial challenges and insights on how to tackle them. Institute for Government. Available at: https://www.instituteforgovernment.org.uk/sites/default/files/publications/4564%20IFG%20-%20Joining%20up%20around%20local%20v11c.pdf.

Wright, J., 2021. The alexafication of adult social care: virtual assistants and the changing role of local government in England. *International Journal of Environmental Research and Public Health*, 18 (2), 812. doi:10.3390/ijerph18020812.

Zajko, M., 2023. Automated government benefits and welfare surveillance. *Surveillance & Society*, 21 (3), 246–258. doi:10.24908/ss.v21i3.16107.

Zouridis, S., Van Eck, M., and Bovens, M., 2020. Automated Discretion. *In: Discretion and the Quest for Controlled Freedom*. Springer International Publishing, 313–329.