Digitalised Welfare:
Systems For Both Seeing and Working With Mess

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ABSTRACT

Digital welfare does not operate in a vacuum, but rather transforms non-digital and unofficial spaces of welfare provision. The digitalisation of welfare occludes the complex reality of poverty and erects digital barriers to accessing welfare. Digitalised welfare has not abolished face-to-face support, but has relocated it to unofficial sites of welfare. The apparent efficiency and simplicity of the state's digital welfare apparatus, therefore, is produced not by reducing the 'messiness' of welfare, but by rendering it invisible within the digital framework. In this paper we compare two approaches to welfare digitalisation and identify three considerations for welfare service design that might reduce the digital barriers, re-build a sense of self-efficacy and increase service accessibility and inclusion.

CCS CONCEPTS

• **Human-centered computing** → *User studies.*

KEYWORDS

welfare, digitalisation, food bank, universal credit

1 INTRODUCTION

The 'Digital by Default' strategy set out to move public service delivery online and make digital interfaces a core means of interaction between people and the state. From the beginning, the strategy was intended to raise the quality of service, *and* to reduce the public deficit [29]. Digitalisation squared the circle of improving government services while cutting budgets. Universal Credit, the UK's digitalised welfare system designed to simplify the welfare system by combining many payments into one and to incentivise graduation into paid employment, reflects these twin priorities. Universal Credit has come under extensive criticism for failing to meet either of these goals. On the one hand, costs appear to have spiralled [33]

and on the other, the implementation of Universal Credit has potentially raised the barriers and challenges to accessing the system and made it harder for individuals to obtain benefits to which they are entitled. For example, in May of 2019, the British newspaper the *Observer* reported that over a million households - roughly 60% of all claimants - were receiving less than their full entitlement [22]. These negative outcomes have increased the need for more informal local welfare spaces located in community centres, food banks and churches.

This paper presents two ways in which welfare has been digitalised in the UK. We compare the centralised digital system of Universal Credit with a local semi-digitalised provision of food banks and identify three considerations for welfare service design that might reduce the digital barriers, rebuild a sense of self-efficacy and increase service accessibility and inclusion.

2 RELATED LITERATURE

The digitalisation of welfare, and in particular the creation of digital interfaces for the access of welfare, raises concerns about the creation or exacerbation of 'digital divides'. Digital inclusion is not simply a question of digital resource distribution but also of whether this resource can be effectively used by such individuals, who risk becoming an excluded digital underclass [21, 25, 26]. Alston [3, p.13] highlights *"the least well off are far more likely to be severely disadvantaged by out of date equipment and time-consuming and unreliable digital connections"*. Digitalised welfare demands 'self-efficacy' to independently manage access to systems, processing complex information and making decisions as to what and how to communicate with the state. Poverty often undermines that self-efficacy. Firstly, poverty manifests in complicated ways which individuals often find difficult to render *'legible''* to the service, or evidence digitally. Secondly, poverty is psychologically exhausting. One study found that just *imagining* financial stress " had the effect of making [individuals'] IQ drop by between 13 and 14 per cent. That is the same impact as going without a night's sleep" ([28] as quoted in [24]). Moving away from face-to-face interaction and human relationships in welfare service delivery towards digital interactions exacerbates both effects, at the same time rendering the needs of claimants invisible to the system [20].

Scholarship highlights how digital exclusion thereby reinforces multiple dimensions of existing social inequalities [37]. For example, Watling [44] and Easton [13] have explored inclusion and exclusion within digitalised welfare, noting social resources are essential - yet often overlooked - assets in the long-term success of technology. Watling [44] noted that the government's promise that *"no one will be left behind [in digitalisation] runs contrary to the reality for those already alienated from virtual lifestyles."* In ICT4D

literature Kleine [23] and Oosterlaken [34] advocate a capabilities approach to this challenge that examines the broader informational, technological, and *relational* (i.e. social) capabilities that underpin the use of technology.

2.1 The Digital in Universal Credit

In 2018, UN Special Rapporteur on Extreme Poverty and Human Rights Philip Alston led a team to examine extreme poverty in the UK. The study report described digitising welfare as a *"nationwide digital experiment"* upon the *"most vulnerable"* in society [2, p.7]. The Good Things Foundation, a British digital inclusion charity, described in their testimony to this UN study [15] the range of such barriers, including: technical errors in the application process resulting in delayed payment, a lack of the digital footprint to use the verification system, GOV.UK Verify, and missing communications from the welfare providers.

Digitalisation has not only changed the method of welfare delivery but has also substantively changed the *content* of welfare delivery. The delivery of Universal Credit incorporates automatic Risk-Based Verification (RBV) which assigns claims a probability of being fraudulent, and so-identified low-risk claims are fast-tracked, with greater attention being given to 'riskier' cases [11]. RBV collects data from a variety of digitalised sources. For example, the UK's tax authority's, (HMRC), Real Time Information (RTI) system supplies details of income tax payments, and those who are claiming welfare through Universal Credit but who are also in work have their welfare payment automatically adjusted accordingly. RTI also identifies people who have not declared (or have underdeclared) income from earnings or pension payments, and reports from landlords and partners about claimants budgeting and digital skills [11].

The digitalisation of welfare also provides the opportunity for a more strict delivery of the conditions under which welfare is accessed and provided. Social researcher, Pantazis, [36] suggests that the *'racheting up of conditionality'* in Universal Credit stems from the assumption that *'jobs existed if only people could be bothered to actively look for them,'* positioning low-paid work as simply a *'bad choice'*. However, digital design is key to the bread and butter of access: claimants are required to upload specific forms of data to demonstrate compliance with the conditions of welfare payment, digital checking of data determines how claims are processed and sanctions imposed. In turn, that design embeds values, conceptual categories, and normative judgements in ostensibly *'technical'* detail: for example, RBV and identity checks reflect a very particular image of what claimants are like, what they might do, and what needs to be done to encourage them into behaving as the system intends.

2.2 Food Banks

In contrast to the national centralised structure of Universal Credit, food banks in Britain are decentralised and local. In 2019 there were some 2,000 food banks in the UK, of which over 600 were independent of even the loose coordinating structure of the Trussell Network [14]. Food banks work in particular communities and areas and claimants interact with food bank staff face-to-face and use digitalisation for its administration and outreach. Although

formally separate from the state, they are a vital component of the social system, more broadly conceived, for the amelioration of destitution. For this reason they can be conceived of as a distant-but-vital branch of the 'shadow' or 'hidden' welfare state [17, 19].

Food banks provide emergency food to those identified as at risk of 'food poverty'.[1] There is an emerging scholarly consensus that the implementation of Universal Credit has led to a steep rise in food banks [7, 10, 16, 46]. In 2017, the Trussell Trust & the University of Oxford, published a report which concluded that food bank users are those "who have been most affected by recent welfare reforms," particularly those with disabilities, single parents, and large family households [27, pVII]. In a further report, the Trust found 30% increase in food bank referrals where Universal Credit has been rolled out for at least 12 months" [1, p.5], and attributed much of this was due to the five-week waiting period that Universal Credit imposes. Only 37% of their sample waited for their Universal Credit payment for six weeks or less but 20% waited for 7 to 12 weeks, and 8% for 13 weeks or more. One respondent commented *"I have been waiting four weeks for one payment of benefit for food - without the food bank I would literally starve"* [1, p.7].

Sanctions[2] are a key cause of food poverty. The Child Poverty Action Group's report [38] on understanding food banks, affiliated with Oxfam GB and the Trussell Trust, found that 20-30% of their sample said that their *"household's benefits had recently been stopped or reduced because of a sanction"* [38, p.10]. Indeed, food banks and other charitable groups note that *"systemic reform [...] is needed to stop families falling into the hunger trap"* [46].

As Garthwaite [16, p.35] notes, there is a *"substantial lack of awareness of how food banks actually work and what it is they do,"* and that contrary to popular belief, claimants cannot simply walk into a food bank to collect food. Rather, once the food bank has received donations from the public, volunteers assist in sorting and storing food. If a person is in need of emergency food, they are assessed by front line professionals (for instance, GPs, probation officers or Citizens Advice Bureau workers) and given vouchers which are taken to a food bank to be redeemed for three days emergency food.

The insecurity that leads people to food banks has a detrimental impact on mental and physical health. Thompson et al [42] find that food poverty exacerbates existing health problems and causes new ones, particularly in terms of *"providing adequate care and nutrition to children,"* due to the *"lack of access to adequate fresh food, food storage and cooking facilities."* It is these levels of deprivation that further make difficult the complex decision making needed for successfully accessing digital systems by depleting levels of self-efficacy and confidence [9].

3 RESEARCH AND METHODS

To examine the interaction between centralised welfare provision and local welfare provision, we spent time in food banks and community kitchens over a month-long period at the following sites:

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[1]The Department of Health defines food poverty as 'The inability to afford, or to have access to, food to make up a healthy diet.' [31]
[2]Penalties imposed on claimants who do not meet conditions such as attending job centre meetings

- *Wimbledon and Worcester Trussell Trust food banks*, that deliver emergency food to people in the community three days a week. One researcher volunteered in the Worcester food bank assisting in organising the donations and shadowing staff as they spoke to clients, two or three times weekly for a month, organising food parcels and the stockroom. During this time, the researcher engaged with approximately twenty volunteers, two senior food bank managers, and approximately twenty clients across both sites, to have conversations with individuals people awaiting food parcels.
- *Southwark Know Your Rights*, a community hub located in Bermondsey that offers free advice to people who are on Universal Credit. One researcher attended a Know Your Rights session, which involved twelve people applying to Universal Credit.
- *The Lighthouse Project*, a community hub in Woking run by volunteers that offers creative projects to support vulnerable people in poverty, ranging from painting to relaxation sessions. One researcher attended a 'Nurture session', which was led by a yoga instructor to help the participants understand the importance of sleep, and to learn breathing techniques to assist in relaxation.

Our methodology is ethnographic. O'Connor and Baker define ethnography as being *"distinguished by the use of participant observation alongside other methods"* that *"allows for researchers to share experiences with their research participants to understand and empathise with their world views"* [35, p180]. Therefore, our findings are rooted in *"immersed practice and distanced reflection."* [45, p2730]. Information gathering was a mix of observation, accidental encounters, and unstructured interviews.

After visiting a site, we compiled detailed notes that followed the same pattern: what the researcher did and saw, conversations had overall feelings about the space and what had happened. Maynard and Purvis recommend that ethnographers keep a research diary throughout [30, p1]. This involves detailed notes of "everyday activities and social interactions," [40, p.196]. Once fieldwork had been completed, we followed a thematic analysis, coding data into thematic categories to identify consonances and dissonances [4, 5]. As in our previous research, this meant that "narratives were aggregated [...] and relationships between the individual themes were explored" [8, p5].

4 FINDINGS

Three preliminary themes emerged from our analysis:

- What is takes to access Universal Credit
- How food banks operate differently
- What communities can and can't do

The analysis provides a clearer picture of the interaction between centralised and local welfare provision and sheds further light on some of the unintended limitations of a centralised digitalised welfare system.

4.1 Hurdles to Accessing Universal Credit

4.1.1 IT Poverty. Many did not have access to internet at home, creating an obvious block to the first stage of applying to Universal Credit. As the Wimbledon food bank manager noted: *"when the*

bills are racking up, WiFi is the first to go." Members of the Southwark Know Your Rights group emphasised the stress of applying to Universal Credit online. They described the situation as one of *"IT poverty,"* both in terms of a lack of technology and the skills to use it. Uniformly, the online interface of Universal Credit was described as complicated, particularly for people with learning difficulties. The website was held to not signpost the process of applying itself, nor how to speak to anyone if they had difficulties. For example, a man with extreme dyslexia explained that he found it impossible and many had made mistakes in the forms and online submissions, resulting in delayed payment and sanctions.

4.1.2 No Support. No participants felt that the limited face-to-face support from the state welfare agencies resolved issues with their online applications. This was because the service representative is reading the same screen as the claimant, and often *"don't have the knowledge"* to properly advise or assist them with the online process, nor the authority to interrupt the functioning of the digitised process. This led some participants to ask: *"if they can't do it, how are we expected to?"* At best, a service representative can give claimants a meeting (usually three weeks later) with another member of staff to assist with their online application. But the second meeting is invariably stymied by the same problems as the first, and a three-week delay on payment would be catastrophic for many. The lack of support of face to face support when completing Universal Credit claims often resulted in claimants asking for help from food bank workers who may not have the necessary welfare knowledge. The Wimbledon Food Bank manager expressed that often users needed help with their Universal Credit applications but that she was not necessarily best placed to support the individual: *"I'm in a situation where I've not had to go onto Universal Credit, but actually if you asked me to do it today, I am sure it will be a very hard process."*

This illustrates that problems with digital services cannot be overcome simply by retaining face-to-face meetings if a structural consequence of digitalisation is that individuals working for or alongside the state *also* understand the system's inner working less, and their space for the exercise of discretion has been drastically curbed.

4.1.3 Suspicion. Claimants see the digital hurdles of Universal Credit as part of a broader set of *'delay tactics'* aimed at punishing anyone trying to access welfare. They pointed out that Universal Credit online applications demand repeated re-proving of their status as in need. The obvious message they take is that the government regards them as dishonest and permanently looking for opportunities to defraud the public purse. As one stated, *"it feels like the first question they ask you is: when did you start lying to us?"*

This was felt particularly keenly by those participants with long-term health issues or disability, who must nonetheless engage in repeated complex processes to secure payment. One respondent in Southwark described how the online system quantified and ranked his illnesses. He has anxiety and depression, as well as an under active thyroid. When he received medicine for his thyroid problem, his online capability assessment stated that his illnesses were *"half fixed."* This creates obvious and dangerous incentives not to seek treatment for conditions until it becomes unavoidable.

4.2   The Logic of a Food Bank

Food banks provide a service that needs to be designed in such a way that it can be clearly scaled up to meet demand. There are many steps taken before an individual accesses food parcels:

- Food is donated at a pick-up point (such as a supermarket);
- Food is collected and organised at the bank;
- Identified and processed clients picks up a voucher from a GP or job centre; and
- Client 'trades' the voucher for a parcel at the designated bank.

It was observed that digitalisation had been introduced to monitor clients: when a person comes to the food bank, the unique code from the voucher is inputted into a computer system which tracks how often someone collects a parcel. However, the food bank's digital make-up is more flexible than Universal Credit; rather than provide summary decisions which must be enacted, the digital system ultimately only makes indicative recommendations which are subject to human discretion.

Across all sites, volunteers at the food bank attempted to develop workarounds in which the process could be experienced as 'machine-like' or cold. This explains many apparent 'inefficiencies', such as devoting staff time to always making sure recipients had a place to sit, offering hot drinks, and so on.

Administering and managing donations is an area that needs structure and process in order for food banks to be effective in delivering their main service. The service design needs to be adjusted to the particular risks and constraints of the context in which the service is delivered. For example, in Wimbledon, the collection point and organisation stations are in the main church hall, with a stockroom in a smaller room next door. The stockroom fills and empties with unpredictable waves of donations. Staff must navigate boxes of donations stacked precariously on top of each other, piles of plastic bags, and a system where different sizes of box correspond to different parcels (so a family of four would get three bags in one box, and so on). Whilst the volunteers are very well organised and swift in their decision making, the layout and lack of space and time means attempts to 'zone' these spaces functionally often breaks down. On one occasion, volunteers spilled out to place unprocessed donations and prepare packages in the church hall, where recipients were waiting. This is a problem not least because it makes it easier for donations to go astray. As the manager stated:

> "please get these toiletries into the stock room, there's too much temptation here as that's like £40 worth of stuff."

The design of the service is also shaped by how the service user is conceptualised. As in Universal Credit, the logic of a food bank is constrained by the need for efficiency, but what efficiency *is* is conceptualised very differently. For example, the inclusion of a cafe in the Worcester Branch reflects an understanding that within the constraints of a service claimants must be treated with kindness and supported with care if a sense of self-efficacy and agency is to be engendered. Obviously these are not institutions with money to burn, so kindness and empathy must be provided efficiently. It is unhelpful to think of these values as opposed: instead, we should ask efficiency of *what*, and for *whom?*.

The conceptualisation of the service user plays out in the spatial design of the food bank; in the Worcester branch, the volunteers set up a cafe at the front of the warehouse. When clients entered in to wait for their food parcel, they can sit in a comfortable setting, drink a hot drink and eat cakes brought in by the volunteers. The donations in the warehouse are (usually) hidden from view for the clients, and the room is brightly decorated, with jazzy tablecloths and vases of flowers. These should not be thought of as inefficiencies. The work of the volunteers in cultivating this space is justified by the need to make food bank users feel at ease. This was also true of the Lighthouse Project, who emphasise the importance of having attractive and comfortable spaces for clients to relax in. This space was decorated with large sofas and tapestries. The appearance of the space was explicitly linked by the manager to the need to undermine internalised media characterisations of welfare recipients as *"unworthy scroungers."*

4.3   Community Action

There is only so much a food bank can do. For many, collecting a parcel of food chosen for you by someone else can feel demeaning and embarrassing. Scholars have noted how the interactions and status hierarchies in a food bank can induce deep shame, rage, and low self-esteem [6]. One respondent described how degrading it felt to receive food chosen by somebody else. One with a physical disability had to queue for several hours at a soup kitchen, an experience she found *"dehumanising,"* but felt unable to vocalise her distress because she felt she was *"supposed to be grateful."* Another highlighted how he had been given out-of-date tins from the food bank, but having no other option, *"of course"* he ate them.

This suggests there are real limits to how much the organisers can create positive experiences through their structuring of the space and the interaction. Ultimately, people in this position have very little agency, and are routinely subject to the choices of strangers. Many find this exceptionally damaging to their dignity. Due to the nature of the food donated, it is often difficult to get *"proper"* meals. The Wimbledon manager explained:

> I go to schools and [...] I give them a parcel for one person. I then say: make three meals per day. You need your breakfast, lunch and dinner. Now, the parcel is good, don't get me wrong. We've got a lot of donations and we've got a lot of donors. However, making manageable foods that you would eat on a day-to-day basis is a little bit hard depending on what your parcel looks like. So, when you've got these kids telling you that one of your meals is going to be carrots - tinned carrots - with rice, and that's as good as they've got, I'm like wow this is what the clients see. It's not through a lack of wanting to do [...] it's never done maliciously. It's just what can happen when you've got through two thirds of the food.

As ethnographers have long noted, meals are deeply important symbolic activities, codes freighted with social relations and implicit meanings [12]. Here, the ordered patterns of what constitutes a *'proper'* meal run up against the logic of the bank. The food bank usually has ample pasta sauces, pasta, soup, crisps, biscuits, noodles

and cereals. These items will not go off quickly, are easy to put together with minimal equipment and meet requirements for a somewhat *'balanced'* diet. Without fresh ingredients conventionally regarded as key, the donations produce a *'strange'* combination of food when clients are trying to make 'rounded' meals, which they experience as a further transgression on their dignity. One volunteer suggested that the food bank needs to be modelled on a supermarket, where people can come in and see aisles of food that they can then choose food from. However, having reflected, she noted it may be more degrading to have to check how many items people have. Nonetheless, the current system feels like a hand-out, despite their best attempts to restore feelings of dignity.

5 DISCUSSION

The findings unsettle a number of assumptions about both Universal Credit and food banks: in the case of Universal Credit the simplicity and efficiency is no longer obvious. It is neither simpler nor more efficient. Nor are food banks spaces of *'pure'* compassion freed from the malign effects of technology, bureaucracy, and social hierarchy.

5.1 Outsourcing Complexity

A simpler and more efficient welfare system is a worthy aspiration. Our findings indicate that in attempting to make Universal Credit simple, its digital interface does the reverse. As the field observations and the testimonies of the food bank managers reflect, this approach to welfare occludes the *messiness* of poverty and the process of obtaining welfare, but does not obviate it. Tricky identities and unusual personal circumstances are erased in the digitalised system, often unjustly declaring a person fit-for-work. The way in which Universal Credit may push people *into* poverty is similarly rendered invisible to the state but is highly visible to local points of welfare delivery such as food banks.

The inability of the state to see this messiness is unlikely to be an intended part of the system design. The government's Digital Service Standard [32] requires that all digital products be checked before implementation to make sure they are driven by a full understanding of users, and be grounded in ongoing user research. This was not, however, the experience of our participants. It is worth noting that the Service Standard was amended in July 2019[3] to substantially bolster benchmarks around simplicity and accessibility. This suggests a substantial temporal gap between the original stated aims of digitalising welfare and its manifestation in concrete operating procedures. This starkly illustrates the mutually reinforcing relationship between technology and bureaucracy theorised by David Graeber [18] and shows how reforms aimed at *'rationalising'* and simplifying processes generate more inefficiency, misunderstanding, and error.

5.2 Food Banks as 'Messy' Sites

The upshot is that food banks and community groups respond to the displaced 'messiness' of Universal Credit. In particular, food banks act as an unofficial fourth emergency service, providing *"compassionate, practical support to people in crisis"* [43]. Although access to the food bank is ultimately a mechanical process: the allocation of an inert scarce resource (food) with a relatively defined value

- which can and has been subjected to very complex algorithmic decision-making [e.g. 39] - is packaged and structured as process in order to feel like precisely the opposite.

The digitalisation of Universal Credit is intentionally faceless: that is a consequence of the required aura of dispassionate rationality and smoothly disembodied technical function. Within that structure, it places the responsibility for claims onto welfare recipients. In consequence, claimants also bear the costs when the digital design of Universal Credit missteps. Unlike previous incarnations of welfare, it shrinks physical spaces to challenge or persuade the state otherwise, nor any space for communal action in forming relationships, searching for employment, and receiving support. All the groups that took part in our study emphasised the importance of such spaces for learning, negotiation, and support. What these groups then attempt to provide is an alternate interface in the forms of spaces which reproduce some of these functions; the volunteers' effort to provide claimants with *'nice'* surroundings - the jazzy tablecloths in Worcester, the artwork at the Lighthouse, and so on - are designed to challenge or at least supplant the logic of Universal Credit. They try to recast vulnerable individuals in a dignity-restoring system of care and support, albeit with only partial success.

5.3 Lessons For Welfare Service Design

As Strong notes, the food bank space is emblematic of *"the downloading of austerity onto individuals and communities,"* wherein the impact of the cuts to welfare "are founded and play out" [41, p211]. This means that, unlike the digital interface of Universal Credit, food banks/community groups are reacting to people's needs face-to-face whilst using digitalisation to scale the service and make it more efficient. However, whilst volunteers act with compassion and attempt to restore agency, people experiencing food poverty feel a lack of control and choice. Nevertheless, there are, perhaps, lessons to be learned from the face-to-face elements of food bank service provision that might be translated into digital welfare service design. If implemented, these design features might help to make the messiness of welfare claiming visible to the state and, at the same time, also reduce the digital barriers, rebuild a sense of self-efficacy and increase service accessibility and inclusion.

- *Choice*: offering meaningful choice that service users can meaningfully action is a key challenge. The data gathered from our study sites illustrate how choice is an important means of building and maintaining self-efficacy and a sense of agency.
- *Relational spaces*: welfare delivery relies not only on efficient tasks but also on the relational network to support that service and through which self-efficacy and agency of service users can be engendered. A social space, digital or physical, offers a space where people can meet, not as service users or service designers, but as people sharing experiences of a system. It is a space where people can develop mutual support and co-develop responses to the challenges of accessing welfare.
- *Media with meaning*: a common theme across from the field studies was the importance of *nice* materials through which to deliver the service. This is as true of digital materials as

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[3]Available at https://www.gov.uk/service-manual/service-standard

it is of physical materials. Respect, care and trust can be communicated through the selection of materials. Care is reflected in the effort taken to choose materials that respond to food bank users as people, not claimants. Respect is reflected through the listening and then responding to the needs to the food bank claimants. Trust is conveyed through the making available of materials that have a higher value.

6 CONCLUSION

'Digital by default' does not replace the mess of poverty with simplicity and ease for those in poverty, but it does render that mess invisible to the state. That mess is relocated to unofficial spaces of welfare, such as food banks, who seek to work in ways which return dignity and agency to individuals. In doing so they are a vital component of the overall system. Acknowledging and designing for the mess of poverty in digital welfare systems is potentially an important means of reducing digital barriers, rebuilding a sense of self-efficacy and increasing service accessibility and inclusion.

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