

Micro Sources of Data Aggregators

*Case study: Etive Digital Log Book and Tower
Hamlets Council*

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Hypothesis

Contents

2	Hypothesis
3	Executive summary
5	Background
6	Data verification not data sharing
7	Role of the micro source aggregator
8	Analysis & research
8	Analysis of customer enrolment
12	Demographic analysis
16	Usage in GOV.UK Verify
17	GOV.UK IPV Standards
17	Use cases for the micro source data and aggregator
22	Recommendations
23	User research
32	Considerations for London Borough of Tower Hamlets
33	Overall Conclusions

Readership

This white paper is for senior leaders responsible for digital transformation:

- Government
- Identity community
- Local Government
- Housing Associations
- Education providers
- Credit Unions

A user will be able to present data collected and verified by organisations such as Local Authorities as part of their verification with an Identity Provider. This will help improve IDPs' coverage.

This project explores:

1. Could a user present data collected and Verified by a micro-source as part of GOV.UK Verify?
2. Could an aggregator collate data from micro sources of data to be used by Verify?
3. Could Etime act as a micro source aggregator collating data from multiple different sources which the user would be willing to present?

The project also explored the perspective of the user, in this case, social housing tenants:

1. Is the tenant happy for their housing data to be used as part of the GOV.UK Verify process by an Identity Provider?
2. Does the tenant see benefit in using a digital identity when accessing their Local Authority or Housing Provider?

Executive Summary

GOV.UK Verify has been LIVE since May 2016 and has created over 1 million digital identities for UK citizens. The 7 digital Identity Providers (IDPs) are using extensive data sources to establish citizen's identities in accordance with the standards, the Good Practice Guidelines¹. Citizens need to reach Level of Assurance 2² to gain a GOV.UK Verify account and transact with it. The target is that 90% of the UK adult population can be verified via the data sources available to the Identity Providers.

It is currently estimated that above 70% of the UK adult population can be verified and, of particular note, 55% of unemployed adults. This reveals a gap in the data reach of the 7 Identity Providers in verifying people who are likely high public service users. It is not necessarily the case that the 45% of unemployed adults who cannot currently reach Level of Assurance 2 (LOA2) do not have a digital footprint, but rather that their digital footprint is not currently accessed by the Identity Providers. The Identity Providers use multiple data sources from Credit Reference Files to Utility Bills. If an individual is living in social housing, is on a pre-paid energy meter and has no access to financial loans - they will not be found in those data sources currently being used by the Identity Providers.

Previous OIX UK Discovery projects, in particular the work with the South Yorkshire Credit Union, has identified that micro sources of data, i.e. localised specialist organisations with smaller customer numbers have extensive data on their customers which could meet the Good Practice Guidelines and provide a data source to the Identity Providers. The challenge is twofold.

1. How to determine the quality of the data held by each individual micro-source of data?
2. How to allow access to the data by the Identity Providers in a cost-effective way?

This project has looked specifically at the London Borough of Tower Hamlets data on their social housing customers, a high percentage of whom are unemployed. The scenario of allowing the data to be accessed via an aggregator, in this case Etive Technologies Digital Log Book, was explored. An assumption is made that the Digital Log Book (DLB) is used by a critical mass of Local Authorities making the data both reachable and cost effective for Identity Providers to access.

This paper will state:

- 1) The Local Authority and Housing Association data matches gaps in demographics the Identity Providers currently face.
- 2) The housing data and it's on boarding processes appears to have value against:
 - Element C - low to medium

¹ <https://www.gov.uk/government/collections/identity-assurance-enabling-trusted-transactions>

² <https://www.gov.uk/government/collections/identity-assurance-enabling-trusted-transactions>

- Element E - low to medium

With recommended additions to the on-boarding process there may also be value for the Identity Providers for Elements A & B.

The Elements make up the IPV Operations standards for Identity Providers as part of data quality and ranges they must access to verify an individual³.

For each of these statements the paper will go into detail how these assessments have been made and identify risks around them. The paper makes certain recommendations to the London Borough of Tower Hamlets and Etive's Digital Log Book; how relatively small changes can be made to increase the value of the data against the Cabinet Office GPG standards.

As this is a Discovery project the perspective of the customers was also considered via customer insight research. The results are stark. Not one of the research participants, all of whom were social housing tenants, would abandon the GOV.UK/Verify process due to the being asked to assert their housing data. Although some concern was expressed around the concept of sharing data in general, their concerns were centred on banking and finance rather than Local Authority data. Most participants assumed central Government would know this information anyway. Asserting housing data as part of the Verify process was not seen as a barrier.

This project also explored, with a light touch, the value of the GOV.UK/Verify login to access London Borough of Tower Hamlets services and transactions. This is contained in the User Research Analysis. It showcased that most participants saw value in a secure universal access digital identity but it also revealed that this benefit was recognised more acutely by those who had multiple relationships with the Local Authority e.g. health support, social housing and social care support rather than individuals whose only regular contact with the council is paying their council tax. This is a significant finding as it has potential cost saving implications for Local Authorities. As councils move towards a Digital by Default agenda, their highest users of both services and transactions could be encouraged to self manage their entitled support online, with the confidence on both sides of a verified digital identity.

Readers of this paper, in particular the Local Authorities and other potential micro sources of data, are encouraged to see the value of their data to help their customers gain a GOV.UK Verify digital identity. Not just housing data, which is specifically detailed here, but in social care, education, benefits, finance and beyond. All the principles applied to the analysis and application of the housing data can and should be applied to any other form of customer data the Local Authority is holding on behalf of their customers.

The result of this OIX UK Discovery project is a recommendation that an Alpha project is launched. In addition to the current participants, or similar ones, it should include the participation of one or more Identity Providers. This will allow the Alpha to explore in more detail, including technical architecture, the value to the Identity Providers in being able to access Local Authority data.

³ See GOV.UK IPV Standards pg 17

The Alpha should explore Local Authority use of a GOV.UK Verify style digital identity for their customers to access both services and transactions in an account management style, rather than based on single transactions as it is currently deployed by central and local Government. Tower Hamlets notes that customers usually only do one transaction at a time (whether online, phone or face-to-face) rather than several in one go. However, there is a sense that this might change if it is easy to sign on once and switch from one transaction to another. The customer benefit seems to be in having one sign-on and password for many applications

Background

GOV.UK Verify is the service for citizens to prove their identity online which allows them to access government digital services. Nine services are currently available through Verify, including *Self-Assessment Tax Return*, *Check your State Pension*, Universal Credit and Rural Payments. Verify has been live since May 2016 and there are now 1 million verified accounts.

The current success rate for users who complete a full IDP journey is above 70% for the UK adult population with a target of 90%. The main obstacles for success are understood to stem from identifying activity history and identity verification (through knowledge based verification, KBV). These two elements currently depend on Credit Reference Agency (CRA) data which provides good coverage of the UK working population aged 25-65. It does not cover those without credit activity effectively such as the unemployed, students and retired. In July 2016, 55% of people who are unemployed have the evidence and/or technology to reach a Level of Assurance 2, the majority of people in this group who did not have the evidence and/or technology needed to be verified by certified companies could not be verified due to the lack of evidence of activity history. Groups including the elderly and unemployed are major users of government services so maximising Verify coverage of these groups is vital.

The Verify team, within Government Digital Service (GDS), are exploring a series of methods and data sources to tackle these coverage gaps and improve user experience. There is a dual-goal of achieving full coverage of eligible users and giving users a greater choice of what data they provide to prove their identity. This includes projects trialling the internet life verification⁴ (such as social network data), face-to-face verification⁵ for unsuccessful users, and mobile network data.⁶

Micro Sources of Data is the umbrella label given to smaller organisations that offer localised data sources. Most of the data sources that the Identity Providers access have over 6 million records available. A micro source would provide significantly lower volumes than this. The question is how could they be introduced to the identity proofing and verification market in a commercially beneficial way? Micro sources include credit unions,

⁴ Social Network Data for Activity History – Alpha OIX UK - <http://oixuk.org/social-network-data-for-activity-history-alpha/>

⁵ Face to face recognition by an IDP – Discovery OIX UK - <http://oixuk.org/face-to-face-registration-with-an-idp/>

⁶ Mobile data for activity history – OIX UK - <http://oixuk.org/mobile-data-for-activity-history/>

housing associations, local authorities, education and third sector organisations which provide services to demographic groups where Verify coverage is weakest. This is an opportunity to improve Verify coverage of essential demographics.

For the micro source it offers a potential revenue stream but more importantly enables them to support their users to interact with national and local government and potentially private sector services and transactions effectively through digital. Having a digital identity will open up more digital transactions and services and increase accessibility for the socio-demographic groups detailed. This is in-line with Local Authority and Central Government strategies of Digital by Default to increase the use of online services and self service by making digital processes easier to complete.

Data verification not data sharing

It is important to understand the flow of data between all parties within the digital identity ecosystem and that the user's privacy is central to the technical architecture of the GOV.UK Verify process.

The GDS Identity Assurance Privacy and Consumer Advisory Group (PCAG) have compiled 9 Privacy Principles⁷ which protect the use of personal data for the consumer, creating rules for the Identity Providers. These include that the identity owner must be in control of their own data – meaning that they only share it with whom and when they choose. In addition to this, the Data Minimisation Principle states that the Identity Provider should only ask the minimum amount of information to confirm an identity. They do not harvest data or use it for any other purpose than to validate the individual's identity.

The Identity Provider must be confident that the data they are accessing is of sufficient quality that it meets the standards laid out in the IPV Operations Manual and the Good Practice Guidelines⁸. The data holder, in this case the aggregator, responds to basic queries about the data. This is often with a Yes/No answer but can be more complex if needed. They do not share further details unless specifically asked for - potentially for a Knowledge Based Question. The data is usually encrypted at both ends of its transfer process to ensure the user's privacy.

To ensure that the data is current and that an identity has not been compromised, some data is re- checked by the Identity Provider every 6 months.

The model of using an aggregator does not significantly change the data exchange described above. However, it does place a greater amount of information about a specific individual all in one place. The Digital Log Book (DLB) is assessing a minimal data approach to alleviate any risk of identity theft by hacking. For example, rather than storing a copy of a passport, it

⁷ <https://gds.blog.gov.uk/2012/04/24/identityand-privacy-principles/>

⁸ <https://www.gov.uk/government/publications/govuk-verify-ipv-operations-manual-redacted>

may simply record verification that the passport has been checked by a trained individual and approved as authentic.

It would be a requirement that the Identity Assurance Privacy and Consumer Advisory Group review the aggregator model to ensure the Privacy Principles are being followed.

Etive and Tower Hamlets

The London Borough of Tower Hamlets (LBTH) provides a wide range of services common across local authorities. LBTH are a potential micro source that could provide data for GOV.UK Verify to support digital identity verification. In this project we focussed on Housing Benefit and Social Housing as case studies for exploring the micro-source concept.

Tower Hamlets Homes (THH) manage the tenancies and leases for social housing owned by LBTH. They currently provide housing for residents living in 21,000 (12,000 tenancies and 9,000 leaseholds) Tower Hamlets Council homes. The initial on-boarding is in Tower Hamlets One Stop Shops enabling housing applicants to join the housing waiting list, which also includes 32 other Registered Social Landlords (RSLs). The processes for the other landlords, for viewing properties and agreeing a tenancy, is not entirely clear to LBTH but they are seeking to have a universal understanding on behalf of all tenants.

Etive provide a Digital Log Book for social housing tenants as a self serve tool enabling tenants to collate, view and present their information about their benefits, income, employment and tenancy. The Digital Log Book is designed with the tenant in mind – helping them to manage their information and share it with whom and when they choose. The Digital Log Book is a digital personal data store. For the purpose of this project Etive enacted a scenario where they would accumulate the data for users including from Tower Hamlets Council and Homes into personal accounts. It is presumed that Etive aggregates data and allows access to the Identity Providers in accordance with the Privacy Principles, so data is checked not transferred, unless expressly permitted by the user.

Role of the Micro Source Aggregator

Tower Hamlets, along with other micro sources of data could allow aggregators access to their customer data. The relationship to the IDP would be with the aggregator rather than the micro source of data. The aggregator would collate multiple micro sources of data, likely specialising in specific data categories (e.g. social housing). The commercial relationship would be: Identity Provider to aggregator and aggregator to micro-source.

Benefits

- Simplifies process for Identity Providers (IDPs).

- Potentially the certification and/or assurance of the quality of the data responsibility held by the aggregator rather than IDP.
- Aggregator coordinates and manages micro sources with a clear incentive to expand their coverage.
- User maintains control over access to their information.

Concerns

- Diminishes the potential commercial value of the data for micro sources when a third party is introduced.
- Less incentive for micro source to change processes beyond benefits for customers.
- Unclear at this stage who would take on the role for qualifying the quality of the micro source of data. Potentially the aggregator could take on this role.

Analysis and Research

This report is based primarily on observation of the processes and analysis of demographics data provided by Tower Hamlets. Observation started with observing sessions at Tower Hamlets Council's One-Stop Shop where customers are enrolled and applications first received. This was followed by observation of the remaining steps of the social housing application process with Tower Hamlets Homes. Etime also provided access to their Digital Log Books to explore the data presented to the user and how it can be used.

This project also includes user research on the customer's opinion of their housing data being used as part of the GOV.UK Verify process.

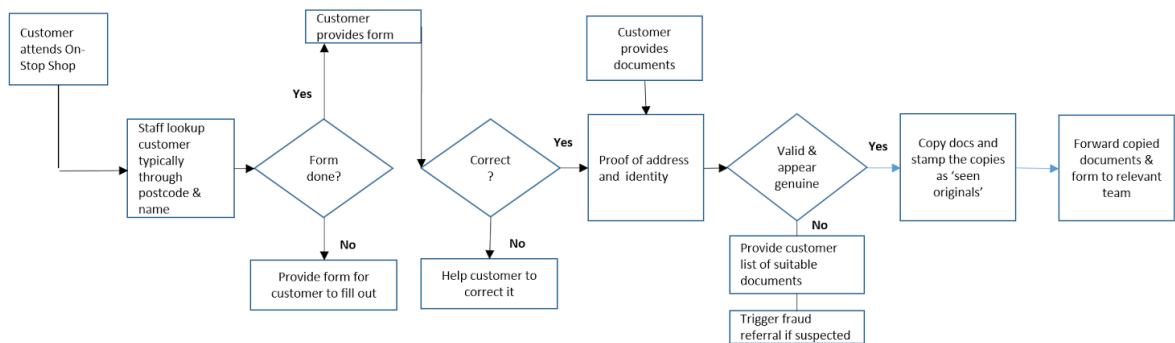
Analysis of Customer Enrolment

Customer Enrolment at Tower Hamlets

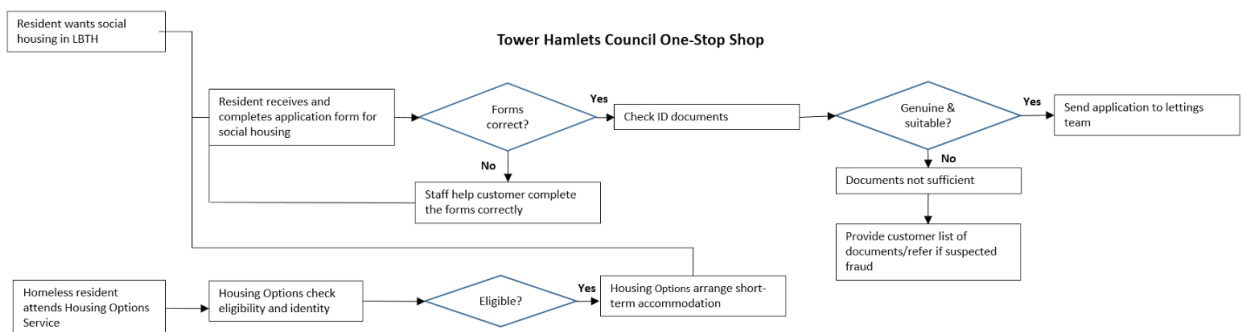
Applications for Social Housing normally start with Tower Hamlets One-Stop Shop. Customers typically attend one of the four enquiry centres to find out about the available support. Customers are enrolled onto the Tower Hamlets CRM system and given application forms to complete. When completed they will return to the One-Stop Shop with the completed form and the required identity documents. These are checked by anti-fraud trained staff and photocopied. The copies are sent to be scanned onto a LBTH system. The application forms are then dispersed to the relevant team.

Homeless residents may also start the process through the Housing Options Service, which tackles homelessness in Tower Hamlets. In this journey the Housing Options team checks the customer's identity and eligibility. They then arrange short term accommodation and direct the customer through the standard process starting at the One-Stop Shop.

The Housing Benefit team receives the form, checks the information against sources and then responds to the customer with the outcome. For Social Housing the application is passed to the lettings team which adds the customer to the waiting list. When suitable properties become available the applicant is invited to a viewing. If successful in bidding for the property the applicant has their identity and eligibility re-checked by the lettings team.

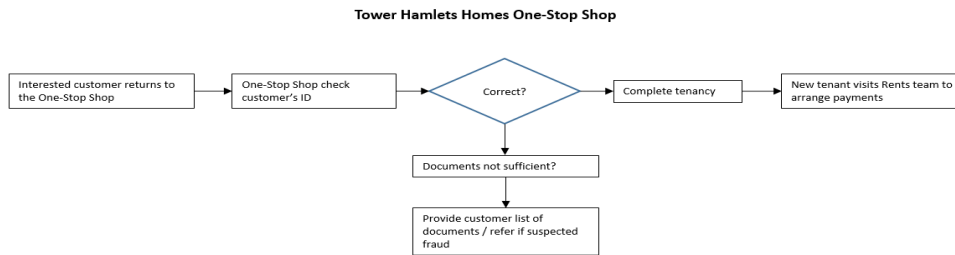
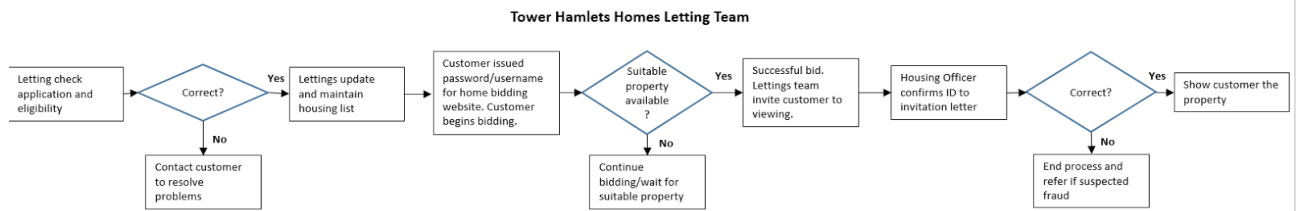


User journey for applications at Tower Hamlets One-Stop Shop



Social Housing application part one (at One-Stop Shop)

The process for social housing continues at the property. The customer meets the housing officer at the property. They are put through a short identity check where they are required to present their invitation letter and a form of identity. At this stage the aim is to check the person attending is the person invited - does the name on the letter match the identity document. The applicant is then shown the property and if they want to bid for it they are taken to the One-Stop Shop to complete the application process. Another identity check is carried out where documents are checked more thoroughly and photocopied. At this final stage the checks are for both eligibility and whether the evidence appears trustworthy.



Social Housing application part two – Lettings Team & One-Stop Shop

Tower Hamlets Council collects the personal information and eligibility details (e.g. income and savings) through the application forms. This is used to create the customer account, which Tower Hamlets Homes updates as the customer progresses through the journey. Each viewing invitation, property bid and completed tenancy is recorded with this account.

Enrolment on the Etive Digital Log Book

The Digital Log Book serves as an account management system/self service portal for the housing tenant, also described as a personal data store. It holds specific data asserted by both the individual and the Landlord, in this case Tower Hamlets and Tower Hamlet Homes. In turn this allows the tenant to directly access services such as reporting a repair or making a complaint and transactions such as paying rent or council tax, applying for a job and managing their finances and benefits.

Typically the tenant will be issued a Digital Log Book where much of the information they have asserted to a Local Authority or Housing Association will be pre-populated. This includes, name, address, rent balance account and details, tenancy agreement, ID documents conformation.

It will be possible to put a digital marker against Digital Log Book users who have gone through the face to face on-boarding process for social housing and those who have not.

There are three scenarios for the Digital Log Book:

Existing housing tenant

This is where a person is automatically enrolled into the Digital Log Book. Depending on the length of their tenancy they may not have gone through a robust identity check in the initial

on-boarding process with the Local Authority or the Landlord. As such the data contained within the DLB in this scenario is not deemed sufficient to be analysed for the purposes of this project.

However, if an existing tenant is automatically enrolled, i.e. they are issued with a Digital Log Book, without having gone through recent face to face identity checks with the Local Authority, there is value in considering requesting that they assert themselves in a Local Authority face to face setting with relevant identity documentation. This will ensure that there is high quality data contained within the DLB. In addition this may provide a benefit to the Local Authority to highlight potential incidences of subletting, fraud, determination of services and affordability.

Housing waiting list

This is where someone is given a Digital Log Book as part of the on boarding process with the Local Authority and is placed on the housing waiting list. Whilst the individual does not have a property and will not be completing transactions such as council tax or rent the Digital Log Book would still contain:

- ID documents
- Bidding history

For the purposes of this project this scenario was not considered.

Awarded a house

This is where the individual is given a Digital Log Book at the start of a tenancy when they have secured a property with either the LA or the HA. This means that all identity checks have taken place in a face to face setting, as described above. The Digital Log Book therefore contains.

- ID documents uploaded by an organisation, having gone through anti fraud checks
- Proof of address
- Verification of Rent paid
- Verification of Council tax paid
- Anti subletting requirement to log in every 6 months to actively assert they are still at the address.
- Record of report repairs, access other services e.g. budget planner, employment, CV builder etc.
- Pay your rent online not automated, it's an active payment

The customer is also able to upload additional information about themselves, which can be static or updated as the customer sees fit. This includes:

- Self asserted financial status – inc. a budget calculator
- Self asserted employment status – inc. a CV builder
- Self asserted educational status
- Self asserted health status

It is this scenario which has been assessed for the purposes of the project.

It should be noted that if rent or council tax is paid by Direct Debit this is of less value against the GPGs as it is an automated payment. However, it is in the best interest of the customer, the Landlord and the Local Authority that Direct Debits are created to prevent any arrears. The increased usage of Direct Debits by social housing tenants is an aspiration with the introduction of Universal Credit. All individuals on Universal Credit are expected to have a basic bank account. In the case of tenants receiving housing costs as part of Universal Credit it is usually paid into the tenant's bank account. It is then the responsibility of the tenant to pay their rent to the landlord. Previously a direct payment was made to the landlord on behalf of the Housing Benefit claimant.

Demographic analysis

Verify Coverage Gaps

Verify currently has lower demographic coverage in the 16-24 age group than in the population as a whole, which is especially the case for people under 20. Coverage is also lower for the over-65 age group. At present, Verify's demographic coverage is also low for the overlapping groups of people with low or no income, people who are unemployed, no formal qualifications, and who are renting accommodation from a local authority or housing association.

Some upcoming government services, such as Universal Credit Digital Service, are likely to draw large volumes of users from these demographic groups onto Verify so exploring opportunities to improve coverage is vital. Current Job Seekers' Allowance claimants, who will make up some of the first people to claim Universal Credit, are less likely to hold UK Passports (64% vs. 80%), photo card GB Driving Licences (52% vs 75%), credit cards (31% vs 56%), and other items used in verification compared to the adult population as a whole.

The demographic details of Tower Hamlets Council and Homes indicates that their customer data could be of great value to Verify Identity Providers (IDPs) looking to tackle this. It is expected that many other local authorities and social housing providers could also provide equivalent data as micro sources to an aggregator.

England Social Housing Demographics

The Department for Communities and Local Government publishes an annual national statistics report providing a profile of social renters and the condition of the homes in which they live. This is published as English housing survey 2014 to 2015: social rented sector report⁹. It does not provide a demographic profile for the London Borough of Tower Hamlets specifically but does present national trends, which can be used to infer Tower Hamlets tenant demographic.

The report provides the following demographics for social housing in England in 2014-15:

⁹ <https://www.gov.uk/government/statistics/english-housing-survey-2014-to-2015-social-rented-sector-report>

- 17% of all households in England live in social sector housing. This equates to 3.9 million households.
- Of these 3.9 million households, 42% rent from local authorities, such as Tower Hamlets Homes. This equates to 1.6 million households renting from their local authority.

It presents the following demographics for social renters in England (2014-15) who rent from a local authority, such as Tower Hamlets Homes:

- Ages are spread out but primarily over 25 with the largest groups aged 35-54. Full breakdown in the first table below.
- Most households are 1 individual (41.2%) or 2 individuals (23.7%).
- Households often consist of a couple (11.2%), couple with dependent child (15.6%) or lone parent with dependent child (17.9%).
- Most are in full-time work (27.3%) or retired (30.5%). A further 9.4% are recorded as unemployed.
- The majority have low income based on weekly income. 47.8% fall into the first quintile (lowest income), 27.4% into the second and 17.2% in the third quintile.

The following tables present the demographics for social renters in England in 2014-15. They are based on a sample of 3,270. Of these 1,446 rented from the local authority and 1,824 rented from a housing association. Some of these tables focus on the household reference person (HRP) who is typically the oldest full-time worker or a person chosen from the household based on their age and economic activity. The HRP is likely to be the individual recorded in Tower Hamlets data who could attempt to use their data for Verify.

Age of HRP as percentage of total survey group (%)			
	All Social Renters	Local Authority	Housing Association
16-24	4.2	3.5	4.7
25-34	14.8	15.4	14.3
35-44	17.3	16.3	18
45-54	20.3	20.1	20.5
55-64	14.7	14.9	14.5
65-74	13.1	13.7	12.6
75 or over	15.7	16.1	15.4

Household Size as percentage of total survey group (%)			
	All Social Renters	Local Authority	Housing Association
1	40.6	41.2	40.2
2	25.2	23.7	26.3
3	15.1	15.8	14.5
4	11.2	11.6	11

5	5.2	5.2	5.2
6 or more	2.7	2.5	2.8

Household Type as percentage of total survey group (%)			
	All Social Renters	Local Authority	Housing Association
one person	40.6	41.2	40.2
couple, no children	11.8	11.2	12.2
couple, independent children only	4.1	4.3	4
couple, dependent children	15.9	15.6	16
lone parent, independent children only	6.2	6.7	5.9
lone parent, dependent children	17	17.9	16.4
other type of household	4.3	3.1	5.3

Economic status of HRP as percentage of total survey group (%)			
	All Social Renters	Local Authority	Housing Association
full-time work	26.4	27.3	25.8
part-time work	11.2	10.8	11.5
retired	30.3	30.5	30.2
unemployed	8.9	9.4	8.6
full-time education	0.9	1	0.8
other inactive	22.2	21.1	23.1

Weekly income (HRP & partner) quintiles as percentage of total survey group (%)			
	All Social Renters	Local Authority	Housing Association
first quintile (lowest income)	47	47.8	46.4
second quintile	28.1	27.4	28.5
third quintile	16.5	17.2	16
fourth quintile	7	6.5	7.3
fifth quintile (highest income)	1.5	1.2	1.8

Tower Hamlets Homes Volumes

It is important to understand that social housing within Tower Hamlets has gone through many changes over the last four decades. This has affected a number of facets including the housing authorities themselves, the properties and the use of records. As such, Tower Hamlets is currently reviewing its housing stock alongside tenancies to acquire a more

accurate view of the demographics. This Discovery Project is part of that process. It is known that some tenants have been in properties for decades but the identity documentation held by the Housing Association or Local Authority is minimal and may not yet be stored digitally. There is a very slow turnover of housing and to aim for 100% digitisation of all tenant data is unrealistic at this stage. Whilst Tower Hamlets were not able to provide a detailed breakdown of their current tenants by demographics, to allow direct comparison with Verify coverage gaps, they have been able to provide volume data for their properties and demographics for the Borough as a whole. This is not ideal for comparing to the Verify gaps but gives a strong indication of the data's value towards this goal.

The 2011 Census reveals that there are 22,558 households in social housing in London Borough of Tower Hamlets. This could be directly with the council or with a registered social landlord (RSL), such as Tower Hamlets Homes (THH). This could equate to over 50,000 individuals (adults) currently living in social housing in the Borough. Assuming the demographics in Tower Hamlets align with the national trends for social housing tenants this data could address the Verify coverage gaps. When aggregated with the data across other Boroughs, and areas of the UK, this would be of great interest to the Verify Identity Providers.

These volumes come with two notes:

1. Not every resident in the property will be named on the tenancy agreement. Those not on the agreement may not be present in Tower Hamlets customer data and therefore could not provide their Tower Hamlets Homes identity as part of the Verify identity process. For example, a dependent child or new partner would not have been through the identity checks so would not have a record to present in Verify.
2. Illegal subletting will inevitably undermine the reliability of tenancy data. The impact is twofold. The sublet resident has not provided identification to Tower Hamlets Homes and so will not have a record. It means that the known resident, who is recorded as the property's tenant, may not actually be at the address but is able to present their Tower Hamlets record as identity evidence¹⁰.

The 2011 census data offers some additional insight into the volumes of social housing tenants in Tower Hamlets. However, it does not differentiate between social housing provided by the local authority and that provided by housing associations active in the area. The table below shows the volumes of social housing tenants in the Tower Hamlets borough based on census data completed by residents for everyone in the property.

Gender	All		Male		Female	
	Vol.	%	Vol.	%	Vol.	%
0-15	33,261	29.9	17,018	15.3	16,243	14.6

¹⁰ The Digital Log Book is exploring opportunities to minimise subletting. These include increasing strength of login - potentially biometrics and requiring a continuous relationship with the Digital Log Book.

16-64	68,285	61.4	32,846	29.5	35,439	31.9
65+	9,651	8.7	4,336	3.9	5,315	4.8
All	111,197	/	54,200	48.7	56,997	51.3

The census data indicates a greater quantity of data that could be of value. It does not however indicate which tenants would be recorded on the tenancy agreement, and therefore recorded in social housing provider data. It also lacks the detail of employment status and income which is currently a major indicator of user success in Verify due to the importance of credit reference agency data in current identity provider services. Finally, the age bands lack the granularity needed to understand how the tenant demographic characteristics align with Verify gaps.

Based on these we should take the 22,558 as the base estimate of customers that could potentially use their tenancy data to gain a digital identity through GOV.UK Verify. This assumes a minimum of one individual in each household has a record with Tower Hamlets that could be used for verification. If all occupants, not just the tenancy holder, are placed through identity checks the estimated figure is likely to be higher but is difficult to predict with confidence. However, there would need to be significant value for this to outweigh the increased burden on London Borough of Tower Hamlets One Stop Shop's¹¹. The other social housing providers could also be of interest to the aggregator to increase the volumes and coverage. However, this project has not assessed their on-boarding process.

Usage in GOV.UK Verify

The demographics for social housing across England indicate that the customer base aligns with the groups where Verify coverage could be improved. At present, Verify's demographic coverage is also low for the overlapping groups of people with low or no income, people who are unemployed, people with no formal qualifications, and people who are renting accommodation from their local authority or a housing association. The demographics data indicates that 50-80% of the social renters (or more) could fit into this low/no income group where Verify coverage is weaker. Gaining access to social housing tenant data could provide crucial verification information to allow these users to successfully complete GOV.UK Verify.

However, with 1,699 providers of social housing registered in the UK¹² as of August 1st 2016 it would not be possible for Identity Providers to have direct relationships with all social housing providers. Instead, the Identity Providers would have relationships with an aggregator or series of aggregators who collate data from multiple social housing providers and present it back to the Identity Providers. When the user asserts their record with the

¹¹ Please see Considerations for Tower Hamlets pg. 32 for additional opportunities and concerns for the face to face identity checks at One Stop Shops.

¹² <https://www.gov.uk/government/publications/current-registered-providers-of-social-housing>

housing provider/aggregator the Identity Provider would be able to query it at source with confidence that reasonable identity checks were completed in the creation of the record.

For this project, Tower Hamlets acts as the local authority social housing provider and Etime the data aggregator. While the demographics for Tower Hamlets Homes' tenants are less clear, census data and staff experience indicates that they are similar to the national characteristics previously presented. Etime already collate housing and income data to provide a Digital Log Book to users to help them manage their finances so are well positioned to explore the aggregator concept that could be applied by a range of organisations and sectors.

GOV.UK IPV Standards

Identity Providers for GOV.UK Verify are required to meet identity proofing and verification (IPV) standards set out in:

- [GPG 44](#): Authentication and Credentials for use with HMG Online Services
- [GPG 45](#): Identity Proofing and Verification of an Individual
- [Operations Manual](#): GOV.UK Verify: IPV Operations Manual (redacted)

Micro sources of data and aggregators would be required to meet requirements set out in these standards, particularly around preserving data quality through requiring reasonable identity checks for record creation and update.

The IPV requirements are presented under 5 elements:

- A. Identity evidence presented
- B. Checking identity evidence
- C. User verification
- D. Counter-fraud checks
- E. Activity history

To understand the role and requirements for each element refer to the GPG 45 for a high level understanding and the Operations Manual for detailed requirements.

Use Cases for the Micro Source Data and Aggregator

There are four use cases that could be implemented without extensive modification of Tower Hamlets current processes or data collection based on information and analysis collected to date. The known benefits and risks are presented for each use case along with recommendations to bring them to the required level. Further concerns and recommendations could arise after more detailed analysis as this is based on the observation and information gathered for this discovery project only.

Use of Micro-Source data	Summary	Examples
Tenancy event activity history (Element E)	The various social housing 'events' could provide activity history if sufficient data is gathered by the micro-source and could be presented to the identity provider.	<ul style="list-style-type: none"> • Bidding for properties • Requesting repairs • Visits by Housing Officer • Inspections • Changing Landlord
Digital Log Book activity history (Element E)	Use of the Digital Log Book could provide additional lower quality activity history to supplement the events. There would be conditions on when this could be countered and on ensure suitable authentication.	<ul style="list-style-type: none"> • Logins • Updating details • Adding evidence/data
Knowledge based verification questions (Element C)	The 'events' could provide the data for knowledge based verification (security) questions that only the customer should know.	<ul style="list-style-type: none"> • Start date of tenancy • Monthly rent cost • Address history • Recent Repairs • Date of visit from Housing Officer
Identity evidence for the living category (Element A)	Verify users must present evidence across 3 categories: money, living and citizen. Social Housing data could be used for the 'living' category to level 2. It may also be used for the 'citizen' category.	<ul style="list-style-type: none"> • User presents evidence they are a tenant in a form that can be checked by the identity provider.

1. Tenancy Event Activity History (Element E)

Through the course of the social housing application and tenancy there are clear 'events' that are likely to be recorded against the customer record in Tower Hamlets Homes' data. In the application process there are several events where a degree of identity checking takes place, including:

- Initial application
- Visiting properties
- Bidding for properties – n.b. this is just login, username and password post on-boarding
- Completing the application
- Collecting keys

Similar events during the tenancy could include: requesting repairs, visits by the Housing Officer and moving property. There will still be a degree of identity check in these 'events' but the requirement is less as the customer and event is tied to the particular property.

Concerns

- It is currently unclear how much data Tower Hamlets Homes collects on each event, its retention period and the quality of this event data. The technical complexities of collating these events has not been explored so it may be difficult to tie information depending on how the databases are structured.
- Many properties will have multiple tenants and many of these events could be initiated by any tenant and would therefore need to be either tied to a particular tenant or all tenants for them to be of value.
- Illegal sub-letting is a known problem. If identity checks are not carried out for in-tenancy events this could allow the 'known tenant' to build up evidence without being active in the property.
- There is currently no data to assess if these events are sufficiently regular to meet requirements for activity history in each of the periods required.

Potential Scoring

As these events typically require direct interaction with Tower Hamlets Homes and a degree of identity checking there is a reasonable barrier to customers generating activity events exclusively for the purpose of Verify. The events can also be verified at the source. They will often be tied to a chain of related events but are recorded as separate events.

This data could achieve *Medium* if the above concerns are not too significant. The scoring of activity depends on the longevity of the relationship between the identity and source.

A total activity history score of 9 is required for GOV.UK Verify services. To meet this Identity Providers collate multiple events during a set timeframe with events taken from multiple periods. The requirements for this are quite complex. Please refer to the Operations Manual to understand this further¹³.

If the micro source were to be used for activity history it is likely it would be combined with other activity history sources for many users to reach the total score of 9. If this project progresses to an alpha this could be explored in more depth to understand the levels of activity history for Tower Hamlets Homes' current tenants.

2. Digital Log Book Activity History (Element E)

Assuming Etime acted as the aggregator, the event activity could be supplemented with data on usage of the Digital Log Book. This data could include events such as logins, updates and carrying out other 'life' activities and adding further evidence.

Concerns

- There would likely be a requirement for user authentication (login) for the 'event' to be counted to ensure that the user activity is not automated, e.g. reopening last browsing window.
- Assumes users regularly access the Digital Log Book and complete measurable activity.

¹³ <https://www.gov.uk/government/publications/govuk-verify-ipv-operations-manual-redacted>

- Assumes this online activity is recorded in a form that could be presented to Identity Providers with the tenancy events.

Potential Scoring

For this activity history there is a far weaker barrier to the user creating activity events. While the account holder has been linked to the claimed identity there is currently no significant verification (beyond username and password) to ensure the user is the true account holder. Etive Technologies are looking at adding 2 factor authentication to assist in the verification that the individual managing the account is the person who owns the account.

At present this activity source would likely only reach *Low*. The table below shows the scores this could provide but would mainly only be of value as the tenancy progresses assuming the customer has reason to use their Digital Log Book regularly.

As noted previously, the identity provider could combine this with tenancy events and other activity history sources to meet the required total activity history score of 9 for Verify.

3. Knowledge Based Verification Questions (Element C)

The micro-source data could provide the basis for knowledge based verification questions. Depending on the micro sources included and the user's activity, the aggregator may be able to provide questions from themes. For instance, Etive may be able to provide questions on social housing tenancy, housing benefit and utility costs.

Concerns

- The data may not be sufficient to provide valuable questions as much of the data will be static - not changing over time - so could be researched by false user.
- Users may not be comfortable with the data being used for security questions in a government service.
- The use of knowledge based verification is currently being reviewed to understand if and how the Verify standards could be improved. This could alter the scoring of some questions and reduce the value of the micro-source's data.
- These questions depend on the security and quality of the data. This would need further analysis to ensure it is suitable for creating these questions.

Potential Scoring

Scoring for knowledge based verification questions is determined by the quality of the question. It is also determined by the questions structure. A prompted question, where the user is presented with options, scores lower than unprompted questions. The total pass score depends on the number of attempts required. This is usually achieved through a combination of medium and high level questions (requirements in the Operations Manual).

In the case of Tower Hamlets, it is likely they could provide a series of medium level questions that could be used for identity verification. These could include:

- When did the tenancy start?

- What is their monthly rent?

If the 'event' occurred within the last 90 days these would likely reach 'medium' quality, as identity checks link the claimed identity to the record which is private and not available for purchase.

With more detailed analysis of the data being collected and the processes during tenancy there are likely to be other questions that would be incorporated as firm 'medium' questions. Further analysis would be required to explore the potential questions and their likely scores for tenants.

4. Identity Evidence for the Living Category (Element A & B)

If the user is able to present their social housing record to the identity provider it could be strong evidence for the living category of identity proofing (element A) with strong assurance that the information is correct (element B). The challenge is how the record is provided in the identity provider's journey. Aggregators provide one solution to this.

With specialised aggregators the user could indicate they are in social housing in the identity provider journey and provide the necessary matching information for the record to be found through the aggregator. As Tower Hamlets, and all social housing providers, are required to carry out identity and eligibility checks this could be good identity proof if the record had existed for a sufficient period.

Concerns

- This would likely complicate the user journey of Identity Providers significantly as it would require an option to present evidence through or from an aggregator of micro sources. This is likely to be confusing to users.
- For this use case in particular, the micro-source would have to have stringent identity checking in the creation of tenant records which would require more sophisticated staff training and documents scanning tools.
- The commercial value may be insufficient as driving license and passport are likely to continue dominating the identity proofing evidence so only those without these documents would attempt this.

Potential Scoring

Micro sources could potentially provide the necessary evidence to meet elements A & B identity proofing and evidence checking requirements. To meet the required level for Verify the aggregator would need assure the micro sources complete stringent identity checks (see recommendations), provide a means for users to assert evidence and enable the Identity Providers to check the assertion against the source either directly or through the aggregator.

Further analysis is needed to set out the requirements for this use case. A consistent analysis and certification framework would be required for the micro sources and aggregators.

Recommendations

The demographic characteristics gathered indicates local authority and social housing data could help address current gaps in Verify coverage. The four use cases presented show possible ways the data could be used in Verify. The current data is of interest to Verify and there are several recommendations for ensuring it meets its potential.

1) Further Analysis

- To understand all the 'events' created by user activity, such as paying council tax or signing the declaration.
- To understand how many customers carry out particular activities and how often, i.e. how many users regularly log in to pay their rent on line?
- To explore how the information could be used in the four use cases.
- To understand potential population coverage by Etive. There are approximately 1,699 RSLs. Analysis is needed to understand how many would be needed to make the service viable for Identity Providers.
- On reviewing the quality of the data to ensure records are not duplicated or expired.

2) Formalise Identity Checks

- Tower Hamlets staff are trained in document checking but based on the information received, a greater level of training is recommended to protect against identity fraud if interacting with Verify.
- These checks are often done quickly due to time pressures so are not as stringent as they could be. Greater effort could be made to ensure the importance of the checks is understood so they are carried out fully.
- ID checks are not consistently done for known customers where staff know they have checked their documents before. Checks would need to be carried out for all customers whether they are known to staff or not.
- Currently staff can update personal details without requiring identity evidence and evidence supporting change of details. This could create risks of incorrect/false information so if interacting with Verify, reasonable identity checks would be required for this.
- Capturing a photograph at the on boarding process. This could be used as a check point for all face to face points, including accepting a property.
- Ensuring identity is checked at home visits by Landlords or Housing Officers. This was not assessed during observations for the project, but could be an additional safeguard that the person is living at the property.

3) Review Accepted Evidence

- On the approved documents list there are a number that are difficult to authenticate as there are no security features or standard design, such as letters from employers. The accepted document list should be minimised and all staff given counter fraud training for the evidence list.

- Many of the accepted documents lack unique identifiers, such as a letter reference number, making it difficult to check the evidence at source. This is not currently part of the process but should be addressed allowing documents to be checked at source.

4) Improve Authentication

- As Etime's Digital Log Book enables users to create 'events', update information and complete services it is vital that the service is protected from malicious access. Current authentication only requires username and password so implementing two-factor authentication is recommended. There could be an opportunity to link a biometric to the login process which checks against the Local Authority photographic record.
- The [Good Practice Guidelines 44](#) provides guidance on authentication and credentials which the service should align with.

❖ It is important to remember that the London Borough of Tower Hamlets transactions and services around housing are not designed to create and maintain ID evidence but to provide the service needed by a customer. If there is interest in improving the data against the Good Practice Guidelines and IPV Operations Manual a risk-based review should be conducted to ensure accepted documents and processes are "good enough" for the actual transaction and then assess their value for Verify

User Research

Research objectives

Testing of GOV.UK Verify and Digital Log Book with Tower Hamlets housing tenants to understand:

- How does a user feel when data is pulled into their local authority log book using their digital identity? (In this case verified data from DWP Universal Credits)
- How does a user feel about having their local authority/housing association data asserted as part of the GOV.UK Verify process?
- How does a user feel about logging into their local authority services using GOV.UK Verify?

Methodology: Discovery via contextual enquiry in face-to-face interviews & usability testing with prototypes

Data Collected: Success rate, verbal feedback, tolerance rating

Participants: 12

Ages:		Gender:	
15-24	2	Female	7
25-34	3	Male	5
35-44	1		
45-54	4	Total	12
55-64	2		
65+	0		

Participants were recruited via Tower Hamlets Homes and London Borough of Tower Hamlets communication channels. Only one participant had previously taken part in user testing for another organisation. All participants were social housing tenants living in Tower Hamlets.

Participants were asked about their propensity to use local council services digitally

Council/Govt service usage:	
Low (0-1 transactions mentioned)	4
Medium (2-3)	5
High (4+)	3

What participants did

Contextual inquiry interview to discuss the scenarios of:

- *Creating a Digital Log Book account*
- *Creating a GOV.UK Verify account (to renew their drivers license)*
- *Logging into their Digital Log Book account using Verify*

The participants were asked to create their Digital Log Book to ensure they understood that their data was being held in one place.

Creating the GOV.UK Verify account allowed testing of their opinion on using their data to be applied when gaining a digital identity. None of the participants were aware of GOV.UK Verify or had previously applied for a digital identity.

The final stage tested their understanding and opinion of using a secure digital identity outside of central Government services.

Experience with online council and government services

Findings

All users had previously transacted online with council or government services. The majority were for council tax payments, requests for information, rubbish collection, and parking

- Users were generally happy with their experience, the only pain areas stated were delayed response times and difficulty finding information

- When asked about offline transactions with council or government services some users mentioned pain areas in repetition, filling out forms, proving their need/eligibility for services, and providing information that ‘the council should already have’

Digital Log Book registration flow

Findings

The participants went through a realistic demo of the Digital Log Book. Although they were asked to assert dummy data including a fake name, email, National Insurance Number they were asked to imagine themselves using it.

General observations

- Overall users understood the concept of having a Digital Log Book and could foresee some benefits in using it
- Privacy and security were flagged as concerns, particularly who would have access to the information, having it all in a centralised account, and needing additional reassurances on what type of security measures the DLB had in place
- Sharing data within government was seen as fine, but not with non-government persons such as a private landlord
- It was felt that too much information was being asked for during the set up part, particularly when there was no context provided as to why it was required. Asking for a National Insurance number and bank details caused particular concern.
- Those who had dependents wanted to manage their dependents details from their account

The screenshot displays the registration flow for the Digital Log Book. At the top, there is a blue header with the 'digital log book' logo and the 'TOWER HAMLETS' logo. A progress bar below the header shows four steps: 1 Welcome, 2 Create Account, 3 About You, and 4 End. The main content area is titled 'Registration' and 'Hi, welcome to Digital Log Book'. The text explains that the Digital Log Book is a secure place to store information and can be shared with various services. It lists the information needed for registration: an email address and a National Insurance Number. A 'Be safe' warning is also present.

User quotes

It's all in one, you won't have to go into several little sites you've got it all in one place

Your whole life is exposed rather than one aspect

If you're going to hide your issues, how's someone going to support you?

GOV.UK Verify registration flow

Findings

Participants were not asked to complete the GOV.UK Registration process in full. They watched a short video about Verify and then were taken through the initial pages where they were quizzed about the data they would be asserting. The middle stage of the GOV.UK Verify process, where the citizen is normally asked to assert their, passport/drivers licence and bank account details was skipped. Finally they were asked about the Knowledge Based Verification questions where one had been inserted to include when their tenancy had started.

It was not the purpose of this project to understand the participant's views on GOV.UK Verify's processes or user journey. The objective was to understand their capacity to have their housing data asserted as part of the process.

General observations

- Users generally understood the process and why it was necessary, with the majority appreciating the additional security. However, a few users did not realise they only had to verify their identity once and that it could then be used on other services. This result may have been due to the simplified process they were shown.
- Users that have had to prove their identity offline were particularly enthusiastic about this type of service and saw it as more secure than posting your identity papers.
- Some users struggled to articulate why a third party was involved in the verification process (even after being shown a video). Particularly as they felt Government has access to all of the information needed and that they trust them to handle the identity check.
- Some users were unclear whether they were setting up a Post Office or Verify account which then has potential consequences for recognition on where they can further use their account.
- Two factor authentication was consistently seen as very secure and reassuring and is seen as a strong selling point.

Local authority/housing association data asserted during Verify process

Key findings

How does a user feel about having their local authority/housing association data asserted as part of the GOV.UK Verify process?

No users stated any concerns with information being checked against local authorities and housing providers and were comfortable moving to the next step. When prompted they expressed more concern around Knowledge Based Verification (KBV) questions on banking.

When probed on the question regarding 'where information will be checked against', people generally expected these sources with only minor questioning on housing providers when they were not your local council.

There was some minor concern regarding how secure utility company data is because it was perceived to be easy to set up utility accounts under other people's names.

The overall sentiment was that these kinds of checks were expected of this process and all users stated they would be 'OK' to proceed in order to achieve their goal (in this case renew their driving license). Local authorities and housing association data did raise any significant concern.



To access services on GOV.UK

Set up your identity profile

Choose a certified company

You'll be required to give personal information to prove your identity to the certified company of your choice.

This information will be checked against records held by government, local authorities, housing providers, banks and utility companies.

You don't need to already have an account with a certified company, so you can choose from any on the list.

Select the types of personal information you can provide to see the list of certified companies you can register with online.

Using services on GOV.UK

[Overview](#)

[About registering](#)

[Register now](#)



1. Create profile

2. Personal details

3. Proof of identity

Proof of identity

Identity questions

The next stage is verifying your personal information.

You will be asked to confirm information about you that is held by:

- banks
- credit referencing agencies
- government
- utility companies
- local government
- housing associations

Post Office will check your answer against the relevant records.

This information is not stored by Post Office – it is only used to confirm your id

[Continue](#)

[Back to personal details](#)

User Quotes

I understand they need to do this, and they had to do this to renew my driving license online

Its fine, it has to be, because the other choice is sending your hard copies (which isn't safe)

Local authority/housing association data as Identity question

Key Findings

Prior to seeing the Identity questions page, a number of users mentioned initial concern that they felt the identity questions would not be secure enough and therefore were not likely to select to use them. On actually seeing the types and number of questions asked they were reassured of their security.

No users raised any specific concern with the tenancy question. There was some curiosity around how all of this information was being retrieved, but the tenancy question did not

stand out from the other questions as being too personal to be shared. Additionally, the tenancy question did appear out of context as an identity question when put alongside the others.

Some users stated they would struggle to remember their tenancy start date but would be able to retrieve that information with some research or when presented with the option in the list of answers.

Who is your gas with?

- British Gas
- Sainsbury's Energy
- EDF Energy
- first:utility
- None of the above / Does not apply

When did your tenancy start?

- April 2002
- June 2010
- March 2014

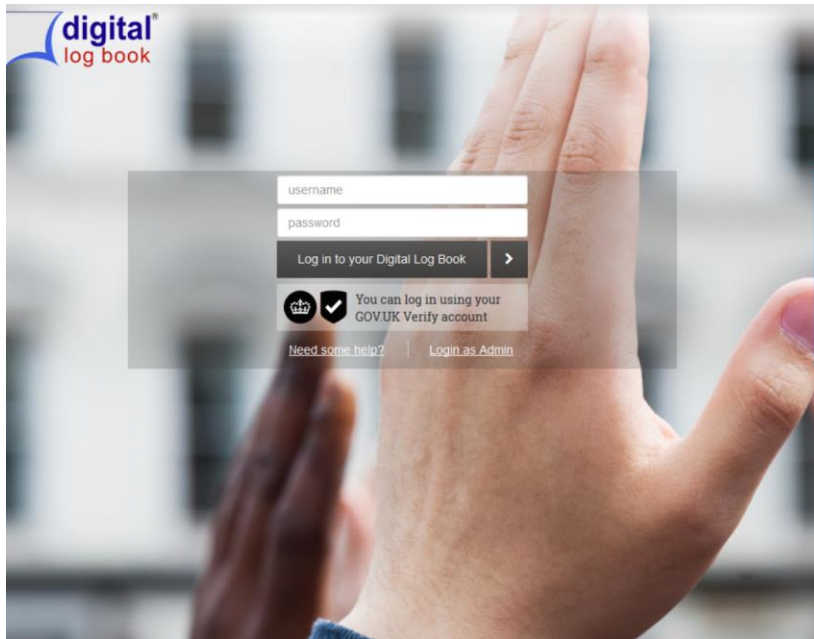
User Quote

If you wanted to verify your identity and you were a scammer it would be hard to answer all three questions. Particularly they wouldn't know when my tenancy started so this makes me trust it a bit more

[GOV.UK Verify account for DLB log-in](#)

Key findings

Only a minority identified Verify as an alternative login option. Users missed it partly due to the visual design making the Verify option look like supporting text (rather than an alternative login option) but also due to lack of recognition of the Verify logo. These users were not completely sure if they had a Verify account even though they had created one in the previous scenario.



Recommendation:

- To increase Verify account recognition ensure consistent Verify branding through the Verify registration process and consistent terminology for the account name as 'Verify' and 'Post office' are currently being used interchangeably.

When users were aware they could use Verify to log in they were likely to prefer this option as it was seen as a more secure method, particularly due to two-factor authentication.

There was also some perception that government services were more secure than local council.

User Quotes

Did I set up a GOV.UK Verify account? I remember setting one up for the post office, all that's in my mind now is the Post office logo rather than GOV.UK...

Username and password any bot can guess, so (Verify) is much safer

(Digital Log book registration) would allow you to set up a fake account, (Verify) really checks the person is who they say they are

GOV.UK Verify account for DLB log-in Additional Findings

When further probed on additional benefits and how they would feel about using a single identity to log in to all council and government services this received mixed responses.

Some highlighted benefits such as not having to remember multiple identities and liking the seamless sharing of data across services to make their lives easier at point of service.

Some however were concerned at the perceived lack of control of your information with an expressed need to keep information stored in separate services. This was due to personal security concerns, being either concern around government having a complete picture of you or that storing all information under one profile increased your vulnerability to identity theft. Having your information distributed was seen as added security against this.

It was not explained by the user tester that the data contained in the Digital Log Book can only be shared with permission by the user. This is something which could be considered in further development work by Etive Technologies to make it clearer for the tenants.

User Quotes

It's not so much an account, it's a key to prove all the accounts you are using are really under your name

Having one identity would be useful for logging into other government services like the DVLA, or applying for a passport

Customer research summary

How does a user feel about having their local authority/housing association data asserted as part of the GOV.UK Verify process?

Checks against this type of data were seen as expected from a government verification service. There was some minor concern about a housing association's involvement with regards to what data/information they would have access to and any they may obtain from the transaction. In spite of this all users were comfortable proceeding with the verification process and housing data did not cause significantly greater concern than the other data sources.

Scenario:	Would proceed	Would not proceed
VERIFY registration w/ housing association data	12	0

How does a user feel about logging into their local authority services using GOV.UK Verify?

Half of users struggled to see GOV.UK Verify as an alternative option for log in due to the visual design and lack of brand recognition. However, when users were able to identify this alternative log-in method they reacted positively to it and were likely to use this option due to the added security benefits (particularly two-factor authentication). Some appreciated the concept of a universal log-in for government services but there were also security concerns around the potential for identity theft from having a single source of data.

The more government/council services an individual used the higher their tolerance for sharing of data and appreciation for the benefits of single sign on (fewer forms to fill, logins to remember. and having a centralised source of information).

Considerations for London Borough of Tower Hamlets

For a Local Authority like London Borough of Tower Hamlets to consider access to customer data for verification by the Identity Providers, they must first see value in the use of GOV.UK Verify as a means of accessing Local Authority services and transactions. This project has skimmed the value by showing that 12 user participants saw that it was a useful and secure mechanism to access Tower Hamlets services. However this does not go into any detail of real time savings, cost savings or digital transformation evidence needed for Tower Hamlets to invest.

There will not be any significant financial incentive that Identity Providers offer a Local Authority for the use of housing or other data. This needs to be considered against the universal backdrop of cost saving targets all Local Authorities are facing. London Borough of Tower Hamlets is looking to save £58m more (54% cut) within 10 years – having already made savings of £138m saved already.

It means there needs to be explicit cost saving evidence for the Local Authorities to see value in aiding their customers to achieve a universal digital identity with GOV.UK Verify. Some work in this area has been done (OIX Warwickshire projects – see below) and whilst it is gaining traction with Local Authorities, it is only one example. There would be benefit if Local Authorities had access to a list of explicit evidence based benefits to the Local Authority, their suppliers and most importantly the customers of a universal digital identity based against cost savings.

The OIX UK Warwickshire projects are the clearest evidence that there is a considerable opportunity for Local Authorities to both transform services for their customers, but also their back end processes, resulting in cost efficiencies.

- Warwickshire (1)¹⁴: Single Identity for Central and Local Government
- Warwickshire (2)¹⁵: Can attribute provision, together with identity assurance, transform local government Services?
- Warwickshire (2) Alpha¹⁶: Towards an Architecture for a Digital Blue Badge Service

However, this was a single transaction of Blue Badge applications. London Borough of Tower Hamlets, along with many other Local Authorities, is considering different approaches to digital transformation before committing in one area.

Looking at the lifespan of the customer is an alternative strategy – all the services, transactions and interactions they have with a Local Authority. This works towards a stronger relationship to be created between the customer and Tower Hamlets and encourages self service. A key to this is attribute exchange. The more accurate data the Local Authority know about their customer, with permission, the more quickly and

¹⁴ <http://oixuk.org/single-identity-for-central-and-local-government/>

¹⁵ <http://oixuk.org/projects/warwickshire-2-can-attribute-provision-together-with-identity-assurance-transform-local-government-services/>

¹⁶ <http://oixuk.org/towards-an-architecture-for-a-digital-blue-badge-service/>

efficiently they can provide services and transactions relevant to that customer. It allows Tower Hamlets to plan with future vision and make savings over a lifetime, rather than focused around single areas. Tower Hamlets are seeking cost savings over 10 years and need to factor in the changing usage of digital alongside increased demands for services. Being able to plan effectively with accurate data is essential. At present this is a key benefit of GOV.UK Verify which has not been explored beyond single transactions.

Should a Local Authority embrace the value of GOV.UK Verify, and the model of usage fit their planned digital transformation strategy, is it then logical that they would see value in allowing access to certain socio demographic group data to help them gain a digital identity. However, as part of their commitment to cost savings, Tower Hamlets is considering either outsourcing face to face identity checks or pushing them into self service digital routes – currently used by some Local Authorities already, including Westminster. This alternative route to identity verification should be looked at in a separate analysis to weigh up the value of the data against the Good Practice Guidelines. It should be noted that this is a popular consideration across Local Authorities so an analysis would be of value to multiple parties.

As part of a review of their customer on-boarding process, consideration should also be given to the recent OIX UK Discovery publication: Face to Face verification¹⁷. This project report also details the customer and potential commercial benefits of maintaining a safe and trusted digital environment for individuals to assert their identity documents.

Overall Project Conclusions

This project has shown that there is value in Local Authority and Housing Association data for the Identity Providers, in particular in plugging the gap of citizens who are most likely to be unemployed and future recipients of Universal Credits.

Without any adaptations to the on boarding process there is value against Element E. By adapting on boarding process for customers in the face to face environments offered by Tower Hamlets the value of the data could be significantly raised. This includes value for Elements A & B. However, these adaptations would need to be made in the context of business continuity with the effect on waiting times, burden to staff and cost increases measured against the benefits of increasing the value of the data to help tenants achieve LOA2 with GOV.UK Verify. Before that can take place Tower Hamlets would need to understand whether they will adopt GOV.UK Verify and in what way to be able to measure benefits versus costs.

The project explored the theory of an aggregator to amass and filter the data into the Identity Provider on behalf of the citizen. As a Discovery Project it has not looked at the technical architecture and so further work in the form of an Alpha is required to explore the value and risks around this model. Commercial considerations have not been discussed between the relying parties at this stage.

¹⁷ Face to face registration with an IDP – OIX UK - <http://oixuk.org/face-to-face-registration-with-an-idp/>

An important consideration for all interested parties is the role GDS has undertaken in this project. The Verify team supplied staff to observe the customer on boarding process and to analysis the data available against the standards. This took no less than a full working week to complete and included co-authorship of this paper. It is unrealistic that GDS is able to supply staff to assess all potential micro sources of data, and it is equally unrealistic for Identity Providers to supply staff. It appears logical that the aggregator might take on this role, but there would need to be a level of trust that their micro sources of data were reaching the necessary standards and maintaining them. This question needs further input and exploration by all to progress to a level where micro sources of data can become part of the identity data eco-system and address the current gaps in GOV.UK Verify's reach.

The overall conclusion is that this is a successful Discovery project and there is sufficient evidence that an Alpha project could explore the elements of technical architecture, trust and cost implications for relying parties. Outside of an Alpha, which explores the value of Local Authority Data, there needs to be able to be further models of GOV.UK Verify reuse.

At present the only evidence based work is applied against single transactions. There would be both value and interest in looking at a digital identity which allowed access to multiple attributes, allowing multiple transactions and services, and whether this will produce efficiencies as well as being beneficial to the customer.