

HOUSING TECHNOLOGY

HOUSING | IT | TELECOMS | BUSINESS | ECOLOGY

Housing Technology & Aareon –
Seven Golden Threads
2022

[housing-technology.com/
research](https://housing-technology.com/research)

DOWNLOAD
TODAY



Paperless tenancies

The 100% digital
tenant lifecycle

From application &
onboarding, to engagement,
finance & maintenance,
and voids & re-lettings

Housing management

Golden threads, data quality, 3D models, cloud
HMS, cloud mapping, robots and decarbonisation

Finance management

Predicting arrears, data quality and
real-time financials

Customer management

Agile self-service, Welsh chatbots, digital
inclusion and housing apps

Mobile working

Becoming 'mobile native', dynamic scheduling
and real-time compliance

Infrastructure

Industry 4.0, hybrid working, supply-chain attacks,
IoT and cyber-risk management



IoT deployment in housing

As we put the finishing touches to Housing Technology's 'IoT Deployment in Housing 2022' report, produced in association with Aico and due to be published in April, we thought it would be interesting to provide a snapshot of some of the primary research captured in the report:

- **Timescale & readiness** – A third of the respondents have already completed a pilot IoT project, and 25 per cent expect to have done so within 12 months.
- **Future importance** – IoT devices and data are important to around 75 per cent of housing providers; only six per cent think that IoT is irrelevant to them.
- **Reasons for deployment** – Tenant and building safety are the main reasons for IoT projects, with tenant engagement and net-zero/decarbonisation are the least important reasons cited.
- **Barriers** – Cost and competing business/IT priorities are the most common barriers to IoT projects, closely followed by a lack of data management resources.
- **Current IoT devices** – Smoke alarms, carbon-monoxide detectors and smart meters are the most common IoT devices deployed at present, while boiler sensors are the least common so far.
- **Future IoT devices** – In contrast, boiler sensors are expected to see the largest growth in numbers, alongside environmental sensors.
- **Supplier choice** – Suppliers' support and maintenance of IoT devices is the most importance factor in housing providers' choice of IoT supplier.
- **Data aggregation** – Housing providers are using (or are expecting to use) device manufacturers' own portals for data collection, analysis and reporting.
- **Integration** – Despite the above two findings, the majority of housing providers are planning to use their own in-house resources to deploy, maintain and support their IoT devices in tenants' homes.

All Housing Technology subscribers will be alerted by email as soon as our IoT Deployment in Housing 2022 report is published in April.

Aareon UK 40
Active Housing (Hallnet) 32
Aico 53
Amey Secure Infrastructure 41
Barnet Homes 44
Basildon Council 46
Bluesky 12
Bristol City Council 24
Capita One 14
Civica 05 & 43
Commonplace 56
Community Housing 43
Crimson 22
Decision Time 06
Derby Homes 12
Esuasive 18
Fast Lean Smart 41
FireAngel 16
Futr 36 & 52
Geosphere 59
Hillcrest Homes 06
HomeLink (Aico) 44
Housing Insight 26
Incline-IT 10
Insite Energy 56
IntoZetta 08
Link Group 28
Lioness Recruitment 55
Littlefish 47
M-Files 56
MIS Active Management Systems 10
Mobyssoft 24
More IQ 43
Morgan Sindall Property Services 46
NEC Software Solutions 34 & 56
North Wales Housing 36
Optus Homes 30
PayPoint 30
Plus Dane Housing 09
Pocketalk 38
Propeller Powered 43
Q-Bot 09
Queen's Cross Housing 28
Reading Borough Council 42
Socitm Advisory 20
Sophos 51
Thenu Housing 26
Thirteen Group 63
Totalmobile 42
Trivallis 18
University of Greenwich 49
Worthing Homes 06

EDITOR
Alastair Tweedie
alastair@housing-technology.com
@housingtech

PUBLISHER
George Grant
george.grant@housing-technology.com
housing-technology

DESIGN & PRODUCTION
Jo Euston-Moore
design@housing-technology.com

EDITORIAL AND NEWS
news@housing-technology.com

DIGITAL MANAGER
Sebastian Emerson
sebastian.emerson@housing-technology.com

RECRUITMENT
recruitment@housing-technology.com
jobs.housing-technology.com
@housingtech

SUBSCRIPTIONS
Subscribe at: housing-technology.com or
email: subs@housing-technology.com

THE INTELLIGENT BUSINESS COMPANY LTD
Hoppingwood Farm
Robin Hood Way
London, SW20 0AB, UK
Head Office: 0208 336 2293

PRINTED IN THE UK BY
The Magazine Printing Company
magprint.co.uk



Forthcoming events

Housing Technology 2023

Annual conference & executive forum

In-person & digital broadcast

01-02 March 2023

Location to be confirmed

HOUSING TECHNOLOGY

2023 | CONFERENCE AND EXECUTIVE FORUM

housing-technology.com



News

Housing Technology's streaming service

ondemand.housing-technology.com

Download on the App Store

ANDROID APP ON Google play

See page 50

Housing management	05
Finance management	22
Customer management	28
Mobile working	40
Infrastructure	44
Special feature - <i>Paperless tenancies</i>	56
General news	59



20 | The devil's in the data...



34 | Focus on people, not processes



30 | Social housing gets in on the app



60 | Review of Housing Technology 2022

56

Paperless tenancies

The 100% digital tenant lifecycle | From application & onboarding, to engagement, finance & maintenance, and voids & re-lettings

TECHNOLOGY SHOWCASE

Please see housing-technology.com/showcase for more information



Social Housing Solutions



Aareon are proud to be the leading partner and driver of digital transformation to the property sector.

Our ethos is to make tenants' lives better by placing them at the heart of everything we do, by delivering the best of technology to drive the right outcomes. Creating value for social housing providers to meet their strategic plans and ambitions.

Contact us today at **hello@aareon.com** to see how we can help with your digital ready agenda.

www.aareon.co.uk



3D models paint a thousand words



Justin Fisher, Product Manager for Housing, Civica

Disrepairs remain a huge and high-profile issue for social housing. Civica's Justin Fisher explores how robust data and modelling can make all the difference.

We all want to feel safe and secure in our own homes. Safety was a crucial, up-front feature of the UK government's White Paper for Social Housing which promised a renewed drive to put residents back at the heart of building safety and go further to deliver real change to ensure residents are safe in their own homes. This would include a stricter regime for construction, day-to-day management and maintenance of higher-risk buildings, with residents having a stronger voice in the system.

But over a year later, there's still a huge problem of disrepairs in social housing, with the mainstream media focusing on the poor state of properties and the unsatisfactory position tenants find themselves in. Already under immense pressure, housing providers are facing increased legal actions from tenants looking for compensation for poor housing, with projected multi-million-pound bills coming their way. At the same time, the Housing Ombudsman has seen a 139 per cent increase in complaints in the past year. Solutions which look at the problem holistically are needed now more than ever.

A smarter approach

The good news is that data-driven digital technologies and advances in systems such as building information modelling (BIM) and digital twins are already making a big impact. BIM, overlaid with analytics from technologies such as AI and machine learning, can predict and forecast repairs better than solely relying on traditional methods.

In short, 3D models combined with robust, reliable and accessible data can help fix things at the right time in the right order. As we discussed at a recent Civica social housing roundtable, digital twins (virtual representations of physical spaces) have been a key part of the digital journey for some time. They have huge potential to deliver savings, make homes safer and greener, and improve the tenants' experience.

That said, creating digital twins demands thought and data prioritisation. This can be difficult when household items, such as a boiler, exist in multiple datasets, from the property's energy profile to safety, servicing and void

property records. It's hard to mesh the data to represent the digital version because each dataset has a different lifespan, purpose and impact. However, once reconciled, the results can be excellent. Services exist to proactively manage the multiple data instances to realise accurate, real-time information, leading to faster response times and increased tenant satisfaction.

Making the abstract real

Many current repair diagnostic tools are abstract, so they don't resemble the individuality of someone's home; if a tenant contacts their housing provider to report a fault, they won't necessarily know how to accurately fix the issue. But 3D models overlaid with the latest data give a much clearer, quicker and accurate picture, so the tenant gets a better repair, completed 'right first time'. This helps reduce costs because repair teams need to make fewer visits and can get around more properties. In trials run by British Gas linked to its BoilerIQ service, it found that its diagnostic software was 19 hours ahead of the tenant even reporting a problem.

3D modelling can also help organisations to run scenarios visually, not just in data records. For example, when fitting new doors, it can show residents what these could look like in their own property and get approval from the outset. It's also a misconception that models need to be complex – they don't. Often a quick-to-load, low-fidelity model will be perfectly fine to illustrate a new feature or service.

Housing technology should always be as close as possible to the products people use in their everyday lives. The Rightmove app is a great example, loaded up with floorplans and property fly-throughs for potential buyers. Housing providers can also use floorplans as 3D models with layered data to show hotspots, such as asbestos assessments in properties colour coded for risk, leading to better decisions.

Safer homes, stronger communities

Bringing all the data and advanced modelling techniques together will result in speedier resolutions to problems and more repairs fixed 'right first time'. Data-driven digital solutions offer a practical solution to the issue of

disrepairs, turning them into a proactive operation rather than a reactive one and increasing tenant satisfaction.

As Mark Weiser, often considered the 'Godfather of the internet of things', said, "The most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it."

Nowhere is this more apt than for social housing. This 'invisible' technology will help housing providers face an

ever-growing number of challenges. Digital solutions will also allow housing providers to adapt and map out the future to ensure tenants are living in the best quality and safest homes.

Justin Fisher is the product manager for housing at Civica.

CIVICA

Worthing Homes heads for the cloud with Civica



Worthing Homes is set to implement Civica's cloud-based Cx Housing Management, Cx Asset Management, Cx Contractor and Civica Involve software in a new five-year contract.

The housing provider has around 4,000 properties and is adding 100 new properties each year, so part of the project's aims was to gain a better understanding of its tenants, properties and assets via a single database.

For tenants, Civica's platform is intended to give them a greater choice of services across more channels, faster resolutions of repairs and quicker responses to queries.

Worthing Homes' staff will benefit from more flexible

working, whether in the office or in the field, alongside increased automation and better workflows.

Simon Anderson, head of transformation, Worthing Homes, said, "Via this digital transformation project,

we're aiming for effortless contact for our customers combined with a single view of our customers and properties. Civica's Cx platform will help underpin this, enabling tenant self-service, more timely maintenance and faster response times."

Hillcrest Homes tightens governance with Decision Time

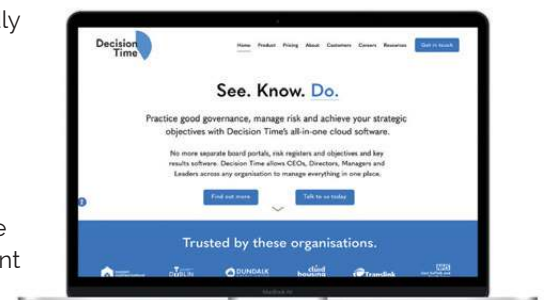
Hillcrest Homes has improved its governance with its implementation of Decision Time's software for managing meetings, risks and objectives.

Decision Time's software makes it easier for housing providers and local authorities to practice good governance by running effective meetings, managing risk and monitoring their strategic performance. It enables CEOs, directors and senior executives to keep track of all these essential requirements in one place.

Angela Linton, chief executive, Hillcrest Homes, said, "Because the contract with our current software provider

was ending, we were looking for a platform that was secure, user-friendly and, most importantly, consolidated all of the governance tools essential to our governing body and senior management into one place.

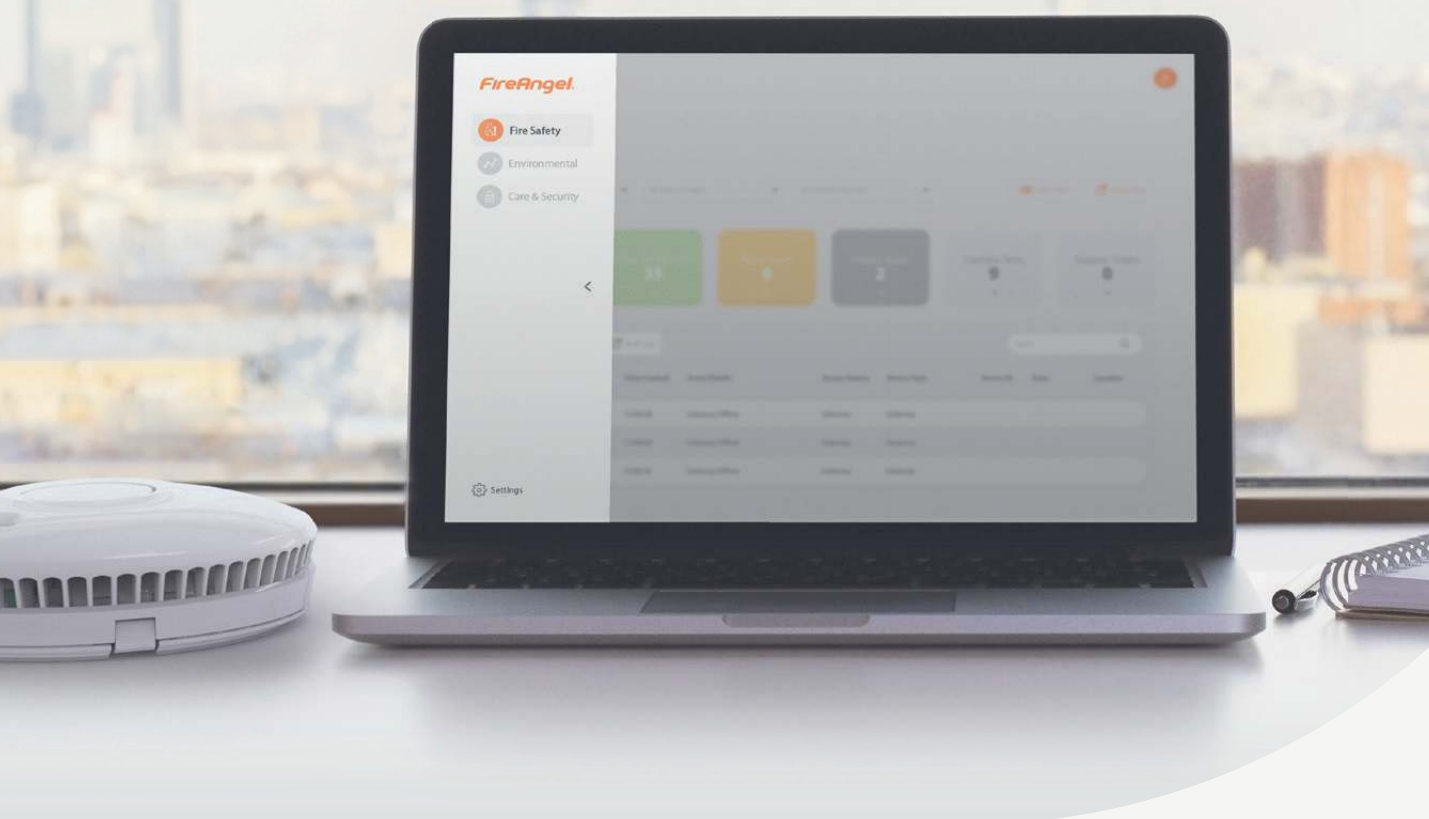
"Early on in our pilot of the platform we were impressed by Decision Time because its focus on risk management and goal-setting would enable us to improve performance across our operations."



IoT powered resident protection

Enabling active risk management

A network of FireAngel's discreet devices provides visibility of previously hidden trends within a property. Temperature and humidity levels, fire and carbon monoxide incidents, and data from endless compatible sensors enable prioritised interventions to take place, offering a level of protection never before seen in social housing.



FireAngel CONNECTED

Find out how we can help protect your residents at fireangel.co.uk/connected

o Security

o Environmental

o Safety



Following the thread

What the draft Building Safety Bill means for housing data

Dan Yarnold, Director, IntoZetta

Thread / n. 1 the connections that link the various parts of an event or argument together.

When Dame Judith Hackitt published the 'Building a Safer Future' report, she recommended the introduction of a 'golden thread' policy, including the digital standards that should underpin the implementation of a golden thread of information. When the Building Safety Bill becomes law later this year, building owners will need to demonstrate that they have effective and proportionate measures to manage safety risks across all high-rise and other in-scope buildings, and that, "the information stored in the golden thread will be reviewed and managed so that the information retained, at all times, achieves these purposes". According to government figures, this will include approximately 6,000 high-rise social housing buildings in England alone.

It will not be a choice. The new more stringent regime will place legal responsibilities on those who commission building work, participate in the design and construction process, and those who are responsible for managing structural and fire safety. It will be the duty of those people who are responsible for a building to put in place and maintain a golden thread.

Asset & component data quality

Given the huge changes that the golden thread will bring to our sector, it's unsurprising that we've seen an enormous increase in focus on asset and component data quality in our recent software implementations and pilot projects. While producing a golden thread undoubtedly presents some significant issues and challenges, it also brings opportunities and taking practical steps now can usher in improvements faster across your portfolio.

The first thing to stress is that although the new legislation identifies high-risk buildings where a golden thread will be required, data-quality issues are typically consistent

across all properties within housing providers' portfolios – after all, data isn't just poor quality in the tallest buildings. It therefore makes sense to understand your data-quality landscape across all asset and component data, even though you may choose to prioritise the remedy of data associated with those assets impacted by new legislation.

By addressing data-quality issues across all properties, you'll be able to implement policies and management of data holistically, providing the benefit of accurate and trusted information to the widest tenant audience.

Correlating poor data quality

Poor data quality is often anchored to the age of the property, its use, its ownership history and in particular the effectiveness of data-management policies over many years. It's very common to find similar properties from the same housing provider with differing data quality fragmented across different systems and even within spreadsheets beyond the management of applications. This is particularly common among housing providers with a history of mergers and transfers of assets between providers.

As ever with data, context is king, so housing providers and their partners must bring the realities of the system landscape together with the business processes to ensure that the records selected to form the golden thread are accurate and fit-for-purpose.

Identifying a golden thread relies heavily on a robust understanding of that system landscape, and not just as a one-off exercise but as an ongoing business-as-usual activity. In practice, that means conducting a detailed data-discovery exercise and implementing controls and accountabilities to ensure the continuous review and maintenance of this information.

Where housing providers are already embarking on a data-transformation journey, such as those consolidating their landscapes into tools such as Dynamics 365, the opportunity to create a golden thread not only exists but is on the critical path of the programme.

A golden thread as a core deliverable

For example, during our work with AzDominion, Clarion, Bromford and other housing providers, the work to establish a golden thread for assets was and is a core deliverable. By profiling the systems of those organisations and implementing a suite of asset-specific data-quality rules, we've been able to create a reliable and documented single source of the truth for each of them.

For those in stable environments, establishing a golden thread for all asset data still has tangible business performance benefits, such as fewer exceptions, improved customer service and reduced surveying and maintenance costs.

Looking after your data and your assets

The ongoing maintenance, as required in the Bill, is about treating data in the same way as your physical assets. Therefore, use a combination of data-quality rules, allied to a detailed data catalogue which clearly assigns responsibility and accountability for data across the business, to ensure the timely and regular maintenance of

the data asset. This governance structure represents the human aspect of data management, often forgotten, but critical to ongoing success.

Ultimately, in addition to the Bill's focus on high-rise properties, now is the time to see these emerging requirements as an opportunity across all properties. Understand your entire portfolio in more detail, demonstrate leadership and a clear sense of duty of care to all your tenants, and realise the benefits of doing so.

Implementing the golden thread won't be easy; it will take time, resources, investment and new roles and responsibilities throughout your organisation.

Our experience strongly shows that it's best to start early and start at the beginning. In this case, the beginning here is data quality; an accurate, trusted and actively-measured data environment forming the firm foundation to weave the golden thread.

Otherwise, things might just unravel.

Dan Yarnold is a director of IntoZetta.



Q-Bot underfloor robots at Plus Dane

Plus Dane Housing has appointed Q-Bot to upgrade its housing stock and use its robots to install underfloor insulation over the next two years. The contract is also the first to be done through Procurement for Housing's 'social housing emerging disruptors' framework.



The large retrofit programme aims to improve the energy efficiency of at least 200 properties to achieve EPC-C by 2030. To start the project, Plus Dane identified 50 of its properties around Cheshire, mostly pre-1930s, semi-detached housing with suspended timber floors making them ideal for Q-Bot to insulate via its autonomous robots.

Q-Bot's method of installing underfloor insulation is an innovative, minimally disruptive approach. More than 10 million homes in the UK have suspended timber flooring and very few have been insulated because of the disruption and cost of doing so. Controlled remotely, the Q-Bot robot is inserted into the underfloor void, sprays insulation to the underside of the suspended floors and then verifies that the work has been completed correctly.



Your path to the future

Chris McLaughlin, Managing Director, MIS Active Management Systems, and Andrew McLaughlin, Managing Director, Incline-IT

For a while, MIS Active Management Systems, like many other suppliers, have seen the housing management system as the core to everything that they do. However, there is a potential hidden truth in the way we work and operate in housing. So, what is the path to the future? Simply put, the path is made up of certain aspects. Data and technology are two that are becoming more prevalent both now and in the future. The truth is we are merely a component, an element, a unit of something greater.

Anatomy of housing technology

After some reflection, when considering the structure, internal workings and evolutions of a housing management system, it emerged that housing technology as a concept can be linked to the interconnected systems of the human body.

When you consider the architecture of the human body, the system comprises a group of organs working together to serve a common purpose. Similarly, when you consider the components of a housing management system, its overall architecture (including its technologies and capabilities) works best when it works as one system.

Your body works in the most effective way because of how it has been architected, but how many people consider the architecture of their business before they buy their software? Or is this an afterthought? If you could start all over again, what would your path to the future look like?

The heart of housing

The heart of housing is the passion, culture and ethos that drives everything we do and how we do it, with a true aim to support others. The enthusiasm, motivation to go that extra mile, close relationships with customers, and an open and honest approach, are what ensures MIS-AMS delivers benefits to everybody – customers, employees, management, suppliers and the wider society. Have you

considered your own values when deciding what software is best suited to help you accomplish your goals?

Brain power

The brain, the ERP system that controls the body, is where the housing management system comes in. The housing management system instructs everything we do. The EDRM system acts as the brain and is the integrated system that combines and stores data and technologies. With IT services evolving at a faster rate than ever, keeping pace with technological changes can be challenging.

What if you had a resilient, secure and flexible system created to achieve your specific objectives, giving you the brain power needed to innovate faster? For an organisation to work as effectively as possible, it's important to understand the full end-to-end process.

Only when you know all aspects does automation really play an important part in driving efficiency, consistency and stability because a slight change in one area can cause considerable changes in another. Much like the human analogy, the IT landscape is a living entity that changes with time and with each refinement. Refining and documenting your requirements helps you to overcome challenges because the more accurate the information you have documented is, the easier it will be to train staff or to pick things up if there are staff changes.

The voice of the housing provider

Good communication is key across all sectors, and it is important to ensure this communication is delivered and recorded effectively. Yet, housing providers struggle to deliver exceptional customer service using traditional telephony platforms, due to a lack of digital channels.

MIS-AMS and Incline-IT have created processes in response to feedback from our customers. Almost every customer has mentioned the need to improve the customer experience, provide a more consistent approach, do more with less and, where possible, channel shift towards automation. We have now transformed dreams into reality!

The contact centre is the voice of the housing provider, both going out and coming in through multiple channels. The focus here is getting the answer to the tenant as soon as possible. With the introduction of 'omni-channel as a service', multiple channels can work as one to achieve this.

Listen to the customer

Listening to your customers is the key to supporting them in everything they do. This kindly links to the ears, where listening to the customer is key to instructing them based on their wants and needs. Today's users require 24/7 access to business applications, on more devices, wherever they are. Have you considered what your customers expect from you, and what you could have in place to support them?

To improve the customer experience in social housing, MIS-AMS and Incline-IT have developed bots on a customer-facing portal, using data from their housing management system. This allows their customers to access personal information even faster with ease. Everything is recorded in the CRM system automatically, enabling housing providers to deliver the best possible experience for end users, and their staff working on the systems.

For more complex enquiries, customers can still be transferred from the same bot to a customer service adviser. This leads to enhanced customer service, faster processes and minimised risk. It also provides a consistent approach across a business working in multiple areas, where different departments gain consistency through data capture.

The backbone of your business

The backbone of your business includes your back-office services and your infrastructure all working as one, linked together by the 'veins' - your network and suite of integrations. Still, there is no single system that does everything. A weak linkage throughout a business creates a void that restricts the overall quality of the resulting IT architecture and limits the organisation's ability to apply and sustain the benefits of implementation over time.

Chris McLaughlin, managing director, MIS Active Management Systems, said, "If you're buying multiple products that don't communicate with each other, you're

indirectly building a problem. While you're adding to your IT estate, at some point in time, you'll need to do an upgrade – in what order do you upgrade your products, when some work with different versions at different points?

"Our focus is centred around managing as much as possible through one system, thereby reducing the interaction points and mitigating the risk of failure in your IT estate. When you then do an upgrade, you are upgrading one system, and everyone has access to all the information they need."

Helping hands

The hands represent showing your support through social processes and doing great things with all your tenants and all your local areas, which links to your people on the ground – your most important asset.

Andrew McLaughlin, managing director, Incline-IT, said, "If something isn't solving a problem, it's not adding value to an organisation. We try to do things to make processes effective and efficient for the users of the system. In our case, it's the customers of our customers who are the primary beneficiaries.

"From a housing perspective, it might be tenants or even caregivers who receive better customer service when they use our services. Ultimately, we operate around problem statements, and we'll look at reworking processes with our customers and identify ways of provisioning new services, always coming back to that core question of, "what is it that we're trying to fix?"

Your most important asset

The feet represent the people on the ground who work closely with their tenants. We live in a 24/7, 360-degree world where information is expected instantly, and it's vital for everyone on the ground to be able to easily access information, online and offline. Consider their path to the future - innovation is about bringing the right people, processes and technologies together.

One body

You wouldn't build a house without plans, or foundations. The same applies to your business. All these areas have a purpose and a way of resolving an issue, but to work as effectively as possible, they need to work as 'one body'.

Chris McLaughlin is the managing director of MIS Active Management Systems, and Andrew McLaughlin is the managing director of Incline-IT.



Derby Homes' Bluesky aerial programme

Aerial mapping company Bluesky is helping Derby Homes roll out integrated solar photovoltaic (PV) systems across its housing stock. A project to identify suitable roof coverings assessed more than 8,000 addresses considering size, pitch, aspect, existing furniture and infringing vegetation.

Using its ultra-high resolution imagery, Bluesky assessed the suitability of each property, measured the number of panels the address could accommodate and calculated their potential output. The housing provider has now installed its first solar array on a batch of trial properties identified by Bluesky.

Ashley Redfern, senior maintenance surveyor, Derby Homes, said, "We'd already completed a successful programme of solar installations at suitable properties where we could fit large systems. We wanted to help as many residents as possible, so we aimed to fit as many systems as we could in the shortest space of time. These installations saved 1,000 tonnes of carbon, generated 1.9 gigawatt hours of electricity per year and saves householders on average £150 a year on their fuel bills.

"Working with Bluesky, we initially defined the study for a 3kW top-fitted system, but this didn't return as many results as we hoped, so we reduced the threshold to a 2.4kW integrated system and as a result we've already fitted 15 systems and hope to fit 2,000 more integrated PV systems."

Using Bluesky's intelligence, Derby Homes is now integrating the installation of solar PV panels with its renewal of existing roofs, using the roofers themselves to install the integrated PV tiles.



[Building safer homes with Cx Asset Management

Energy • Stock condition • HHSRS • Planned work •
Forecasting • Housing quality standards •
Sustainability modelling • Asbestos • Compliance •
BIM • IoT smart homes • Golden thread

civica.com/asset-management

"We wanted an integrated asset management solution that would give us a single source of data to access accurate information, at any time. We chose Cx Asset Management cloud software because it delivers what we want, i.e. asset tagging, BIM. It's secure, resilient and accessible on multiple devices and allows us to use API's which supports our wider digital agenda."

John Chambers,
Group Head of IT,
Stockport Homes



Decarbonisation – The clock is ticking and data is key

Glenn Allan, Head of Product – Housing, Capita One

The pressures facing the social housing sector in meeting an ever-pressing decarbonisation agenda are huge.

It's well known that homes are a major contributor to the climate crisis. Powering and heating buildings account for 40 per cent of the UK's total energy use, with England's homes alone emitting more carbon emissions every year than all the country's cars, according to the National Housing Federation.

Plans to decarbonise the nation's housing stock were laid out last January by the government in its Future Homes Standard consultation. It confirmed plans to ban gas boilers in new homes from 2025, while proposing tighter energy efficiency standards on existing properties, in a move it hopes will bring us closer to meeting our legally-binding 'net zero' 2050 target.

With 2.7 million of the country's homes owned by housing providers and a further 1.6 million by local authorities, the challenges in delivering these targets will be felt acutely by social landlords, particularly when you consider many are still grappling with the complexities and costs associated with bringing their stock up to building safety standards against a backdrop of depleted resources and severely restricted budgets.

Harnessing the power of data

This is why now is the time for the sector to harness the power of their existing data to help tackle these challenges head-on without compromising their core values.

For over a decade, housing providers have been collecting data on their housing stock and tenants for reasons spanning tenant onboarding to compliance, asset management, maintenance, regulation and warranties,

but until now many have yet to use and analyse this data effectively to work out how efficient their stock is and where they could save money.

Part of the problem is how that data is stored. It's common for housing providers to use multiple systems as part of their housing management. For example, they might have one system for rental income and arrears, one for collecting information on maintenance and repairs, and another that covers compliance. For many 'a system' could be as basic as a spreadsheet, with data manually maintained by staff.

The challenge with this, aside from such high levels of manual administration being open to human error, is the data analysis that takes place in the sector today tends to be very static. Too often, housing providers will report on figures after they've happened, rather than actually being able to use the data for proactive, empirical analysis to support business decisions.

But by integrating this wide variety of information within a single housing management system, housing providers could make better investment decisions around decarbonising their stock while balancing the needs of their tenants.

For example, take the replacement of gas boilers with heat pumps. This has been put forward as one solution to reducing carbon emissions within existing properties, but that could do more harm than good in the short term without targeted data analytics.

A housing provider might want to install a heat pump in one of its 50-year-old properties to reduce the building's emissions as a quick win to help decarbonise its stock. But only when you start to pull together information on the property does a different story emerge.

Its stock condition data, for example, might show the home hasn't been properly insulated (a likely scenario



in a property of this age) and its separate tenant records could show several months of rent arrears (an increasing possibility as a result of the economic impact of the pandemic). The poor insulation would mean the home would be likely to lose heat, something that can make heat pumps far less effective, in turn increasing the tenant's utility bills. With their financial situation already stretched, this could force them into fuel poverty.

Simplicity in integration

It's important to note that this isn't about making processes more complicated; it's about using the information that housing providers already have in a more joined-up manner.

That said, there are wider data sets beyond those collected by housing providers that could be applied to a single system, the applications for which are really exciting, particularly regarding decarbonisation.

For example, Capita runs the UK's smart metering network. This gives us unique insights into energy performance data in over 20 million homes, which we can share with our customers for analysis.

For instance, we could use a tenant's accurate energy consumption data, collected via their smart meter, to unveil important 'unknowns'. This might show that a tenant is living in a house categorised as energy efficient, while also having high energy bills.

This flag would prompt a more thorough analysis. The housing provider could then look at some of the causes and analyse whether the property is being heated properly or whether this is causing dampness or poor living conditions, or even if it's affecting the property's infrastructure. Further areas could be tracked, such as what type of insulation or boiler was being used, right down to the light bulbs that were installed.

By looking at the building from an energy supply and demand perspective, we can assess the property's

condition and in turn the living conditions for the tenant. Any concerns can be automatically flagged, and this can again reduce the risks of things such as fuel poverty.

This same data analysis can also be used to help housing providers secure government funding to support its net-zero carbon agenda. Capita is working with a number of local authorities and housing providers in this area; in one recent example, we helped an organisation secure £6m to kick start its decarbonisation programme, supported through accurate and integrated data.

A reasonable concern for anyone considering using tenant data is compliance with GDPR. However, this isn't a problem if the housing provider can make a compelling case about why it needs the information, such as ensuring improved tenant conditions.

Elsewhere, a wider benefit of using a single system is that it can automate data tracking where appropriate, minimising the need to disturb tenants. This can be done by assessing, say, 10 per cent of houses on an estate and then extrapolating those results to the whole estate.

By combining this process with aggregated housing-improvement data registered with the local authority (something required by law for any improvement such as window glazing or change of heating), data can be collected without the need for excessive surveying, consequently saving housing providers time and money.

Ultimately, the key here is to provide tenants with warmer, greener and cheaper homes, while delivering more tailored services. By using effective, efficient datasets, both can be done hand-in-hand with benefits for housing providers, the government and tenants alike.

Glenn Allan is the head of product (housing) at Capita One.



Building confidence in compliance with IoT

Wes Gutteridge, Service Delivery Manager, FireAngel

For housing providers, the responsibility of managing compliance can be incredibly hard because it can be difficult to demonstrate. In the past, documents and reports would have been physically stored and logged for the thousands of social rented properties across the UK, with their respective compliance statuses becoming almost a guessing game once the reports had been filed.



In the future, as we try to improve the 'healthiness' of our nation's homes, further environmental factors such as property temperature and humidity levels may become compliance considerations, thereby only adding to the difficulties. However, the right technology can now ease the burden of this important role in residents' safety.

Digitising compliance

For many housing providers, compliance is a function of time. For example, in the case of fire and carbon monoxide protection, immediately after a contractor has completed an alarm installation, they can be confident that the property is compliant.

But as time passes, and without the resources to test and assess regularly, confidence in the alarm's status and its ability to protect the residents may decrease. Often, the next time a property's alarm is checked after installation

can be a year later during a gas engineer or maintenance team's appointment.

By using the internet of things (IoT) and APIs, housing providers can feed real-time data into their asset management database, giving them a clearer idea of which properties are no longer compliant and therefore require a priority visit from the relevant team. It also means that already-stretched housing teams aren't overwhelmed with reports, but instead receive relevant management data into a centralised piece of software.

Maintaining a golden thread of digital data

Housing providers are under pressure to conform to a 'golden thread' of digital information as recommended in the Hackitt report. This includes maintaining data throughout the lifecycle of a building, with every aspect of a device captured and logged automatically on an easy-to-access system.

But fire detection isn't the only standard housing providers must comply with. Information on fire sprinkler systems, fire doors, extinguishers and emergency lighting are just a few of the safety measures that must also be captured.

IoT-powered resident protection

FireAngel Connected is a purpose-built solution for domestic safety, enabling housing providers to automatically log and access device information for every property they own or manage. This includes installation training, compliance records, device installation images and location identifiers, supporting the 'golden thread' and giving maintenance teams full insights before any site visit.



Once an installation is complete, each property will be signed off by a FireAngel trained installer, providing an instant digital certificate of compliance against BS 5839:6.

Carl Knowles, specification manager, FireAngel, said, "We regularly hear from housing providers and the fire and rescue services about residents removing smoke and heat alarms within properties.

"Whether this is due to false alarms because of incorrect installation, their lifestyle choices or because the alarm needs maintenance, with these alarms removed the resident is unprotected.

"It may not be until the following year that this removal is discovered, leaving not only that resident but all of their surrounding neighbours vulnerable to the risk of fire."

With FireAngel Connected, housing providers can remotely monitor interlinked alarms, access real-time status updates and view instant diagnostic reports for a more efficient, intelligent way to manage their properties.

Data is monitored in real time to alert housing providers about the status of alarms (for example, if removed, triggered or in need of maintenance) in their properties, eliminating wasteful visits, staff time and administrative costs.

Having access to device data from individual properties also allows housing providers to plan and budget for new alarms in future. The solution can be deployed within the parameters of an existing budget and can be connected via cellular technology for better reliability

than wi-fi to ensure tenants are kept safe even if the internet connection is interrupted.

Adapting to a changing environment

When we work in such fluid environments, using the advantages of connected technologies to futureproof properties ensures housing providers can remain compliant when safety standards are updated or introduced.

Following the Grenfell Tower tragedy, both the fire safety and social housing sectors are moving rapidly. Solutions need to be adaptable to accommodate changing regulations and have the flexibility to evolve with emerging technologies.

Combining FireAngel Connected with our New Generation Cellular Gateway, the only gateway in the market with built-in temperature and humidity Zigbee sensors as standard, delivers a holistic resident safety solution.

Creating connections with other Zigbee sensors within a property, such as water-leak detectors, panic buttons, motion sensors and smart appliances, raises resident safety and wellbeing checks to previously unachievable levels, while simultaneously automating data collection and streamlining management activity.

Compliant today, compliant tomorrow

Choosing adaptable connected technologies means housing providers can future-proof their residents' protection, knowing that the monitoring of a property's ecosystem will be scalable and expandable in future to provide increased safety and reassurance should housing providers need to comply with new standards.

Having the right technology empowers in-house teams with the insights to be confident all of the time, rather than just some of the time.

Wes Gutteridge is the service delivery manager at FireAngel.

FireAngel.

Transforming Trivallis with Dynamics 365

Dr. Neil Jones, Corporate Director for Transformation,
and Rachel Schmidt, Business Improvement Partner,
Trivallis

Following our move away from an old, no-longer-fit-for-purpose housing management system to a fully-integrated Microsoft Dynamics 365 system, we thought it might be helpful to others thinking of following a similar path to describe our journey and highlight some key learnings along the way.

Back in 2019, our IT systems were something of a mishmash; an end-of-life housing management system surrounded by a motley collection of smaller systems and interfaces bought to plug the gaps. This was never going to work as a platform for our ambitious digital transformation programme. We needed a new approach.

From a technology perspective, we decided on a Microsoft-centric strategy. Implicit in this was migration to the Microsoft cloud, potentially including a move to Dynamics as the applications platform. To develop our technology roadmap, we spent several months looking at every area of our business, reviewing the way we do things, prioritising needs, understanding where existing systems fell short and identifying opportunities for process improvement.

Strategic non-negotiables

Early on, we defined five core principles – 'non negotiables' that would guide our approach to developing our new system and our choice of technology partner:

- Support all of our teams across the business with a single integrated system;
- Take advantage of pre-configured software to accelerate delivery;
- Don't reinvent the wheel – adopt sector best practice where possible;

- Build internal capability so we can modify and extend our system ourselves;
- We might rely on a partner to get us up and running, but we must take responsibility for delivery.

Our IT strategy, incorporating these principles, is the bedrock of our digital transformation.

Avoiding 'analysis paralysis'

When defining functional requirements, we wanted to steer our business colleagues away from the idea that this would be a one-time opportunity, which inevitably would result in an unwieldy specification document listing hundreds, even thousands, of 'requirements'. While vendors might enjoy pasting 'fully meets' against every line in the document, this approach was hardly likely to help us differentiate between potential partners.

Instead, we developed a framework within which high-level requirements could be discussed, assessed and prioritised, and ran a series of workshops with the business. This proved to be an interesting exercise – naturally, our business users tended to express requirements as 'the system must do this'. We wanted to encourage them to identify opportunities for process improvement, not replicate what we already had. This, we judged, would give us enough to engage with the market.

We invited a range of potential partners to showcase their solutions, emphasising our desire to see working software so we could assess what would be out of the box and what would need to be built from scratch. Crucially, we asked each to take us behind the scenes of their product so we could explore how easy it would be for us to make changes ourselves.

It quickly became apparent that the proprietary 'closed' solutions offered by many software vendors might meet our needs now but would offer limited opportunities for us to innovate. We noted also that these same systems fell some way short of the 'fully integrated' solution we were looking for.

By comparison, Esuasive's team was able to demonstrate how a Dynamics solution would meet all of our non-functional requirements. Above all, it was being shown how easy it is to make changes in Dynamics that won us over. This proved something of an eye opener for Trivallis staff used to having to wait weeks for changes to be delivered.

Exploiting the Dynamics platform

We prioritised our contact centre and repairs processes for inclusion in a phase-one release, delivered in late 2019, followed by housing management during the first lockdown. During lockdown, our use of Teams (which we had implemented right at the start of the strategy lifecycle – almost as if it was planned!) made remote working viable and enabled us to complete our staff training prior to cutover.

We've now been live with Dynamics for about two years; to date we have delivered:

- Core CRM and contact centre functionality, including customer surveys;
- Repairs, including support for our DLO, a contractor works portal, and major works;
- Property and estate management, including voids;
- Lettings and tenancy management;
- Rents and service-charge processing.

In every release we have streamlined and automated our processes to significantly enhance productivity and, crucially, eliminate users' frustration with technology at a time when our business colleagues have had plenty of more important things to worry about.

From a data perspective, centralising our data has given us a single view of every interaction with our customers. This is enabling us to optimise performance, drive business improvement and enhance the level of service we provide to our residents.

Throughout, Esuasive has acted as a 'critical friend', challenging our assumptions, sense-checking our requirements and helping to design our processes to ensure we adhere to our 'best practice' and 'out of the box' principles.

Lessons learned

What have we learned that might help other housing providers considering Dynamics?

- Dynamics 365 has proved to be exactly what we hoped it would be – a highly configurable, scalable platform for solution delivery.
- Leveraging an 'accelerator' has worked for us; the ease of configuring Dynamics has made it possible to deliver much faster than we anticipated.
- The out-of-the-box principle has saved us a lot of time and effort. By adopting the sector-specific best practices inherent in the Esuasive system, we've avoided the painful process of defining our requirements upfront, in detail and system unseen (seldom a good way to specify what you need).
- Engaging our users in design workshops has stimulated innovation. It has also fostered a sense of ownership. Our users genuinely see Dynamics as 'their system'.
- Because it is quick and easy to make changes, it really has been possible for us to be agile in the way we go about delivering new systems (that's a whole other topic, of course).

An IT strategy is not just for IT. 'Digital' is at the heart of our business transformation programme, and it is essential that our business colleagues buy in to our IT strategy and the core principles we have established.

It takes time to build skills in house, so start early. We wanted to cross-train existing IT staff who understand our business onto the Dynamics platform. It can be done, but don't underestimate the learning curve – from a developer's perspective, Dynamics is a large and powerful beast.

Looking ahead

We've made fantastic progress with our transformation, but there is still much to do. Our next major release will include the migration of our existing asset management processes onto the Esuasive system and the rollout of functionality to meet new compliance requirements. Behind that we have further releases slated through to the end of 2022.

Dynamic 365 has proved to be the right technology platform for Trivallis. We're looking forward to delivering the next phases of our transformation and achieving our ultimate objective – one integrated system supporting all our staff and every aspect of our business.

Dr. Neil Jones is the corporate director for transformation, and Rachel Schmidt is the business improvement partner at Trivallis.

Esuasive

The devil's in the data...



Kate Lindley, Service Lead for Digital & Data,
Socitm Advisory

From ensuring regulatory compliance to understanding tenants better, the need for accurate, well-controlled data has never been more critical. Yet many housing providers still rely heavily on off-system working, spreadsheets and manual interventions, downloading data from one system, combining it with data from other sources and then uploading it again to another for, say, performance reporting, creating both data governance and security risks.

The housing regulator expects landlords to have effective control frameworks, and the requirement to comply with 'all relevant law' means GDPR considerations need to be front and centre regarding personal data, so how do you go about improving how data is managed and used to make a positive impact?

Compliance and good governance

It's not just about the IT. You only need to look at the reasons behind some of the Regulator of Social Housing's 'gradings under review' or the housing providers that have been downgraded over the past couple of years to see that data quality is fundamental to compliance and to overall good governance.

Across our sector, data is too often thought of as an IT issue. An effective data-control framework requires people, processes and technologies to work properly together to minimise strategic and operational risk and to maximise the value of data to the business.

There have been several recent examples of downgrades as a direct result of data issues. Some, such as Peaks & Plains Housing, have invested heavily in building back their data quality from source. This involved mapping every asset and ensuring that there was a root and branch review of the data held against each asset, linking certifications and then systemising their end-to-end processes to reduce future risks, as well as ensuring a more robust approach to action tracking. Peaks & Plains Housing is now back at G2 and has openly shared its learnings across the sector to raise awareness among other providers.

Belt and braces

Emma Richman, executive director of operations, Peaks & Plains Housing, said, "Over the past two years, we've taken a belt and braces approach to all aspects of the business, including implementing a more robust and active data management framework. By getting the basics right and by ensuring that our asset data is systemised as far as possible and our tenant data is really accurate and regularly refreshed, we're better placed to ensure compliance and to assess tenants' needs.

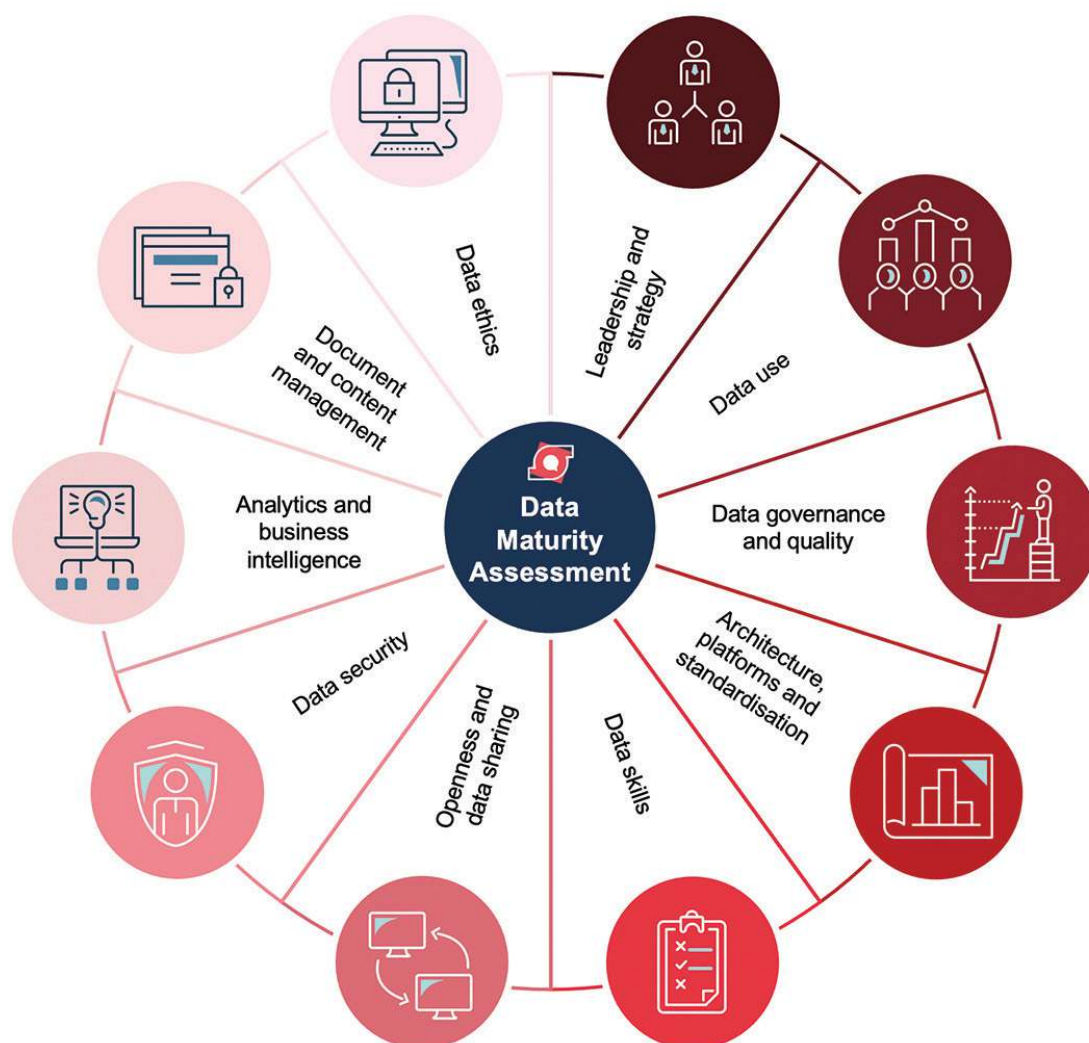
"In the past, our executive board was seeing reports showing asset compliance as green based on dates in the system, when under the bonnet those dates weren't always easily traceable back to a valid certificate at source, so a lot of work has been done to improve things and to ensure that 'data lineage' is provable from end to end and automated wherever possible.

"Having been through a Voluntary Undertaking and come out the other side, I can't stress enough the importance of getting your data and processes right."

Manual interventions and spreadsheets

Like many housing providers, Peaks & Plains Housing was managing data across multiple systems, via both online and offline processes, combined with manual interventions and numerous spreadsheets to plug the gaps between different solutions – a far from ideal scenario, but one that's not uncommon.

Data quality isn't the only risk providers carry, and the sector risk profile clearly identifies cyber risk as another



growing area of concern, with the need to keep on top of an evolving threat landscape and to ensure threats are actively monitored and mitigated.

In just the past year, there have been several well-publicised cyber attacks in our sector – from the one at Plentific that saw a housing provider's tenants hit by phishing emails, through to cyber incidents at South Yorkshire Housing and ransomware attacks at ForHousing and Liberty. Hackney Council was attacked in 2020 and is still working to recover its data.

So with considerations ranging from data management, quality and accuracy through to the complexities of cyber security, how do you get to grips with a messy and complicated data risk landscape?

Data maturity

For many housing providers, the starting point for understanding and prioritising data activity is to undertake a data maturity assessment to understand their overall data position.

Data is so fundamental to everything that housing providers do, it's no longer good enough to look at cyber risks or data quality risks in isolation. It's vital to look holistically at how data is valued, managed and controlled across the organisation. It's only by doing this and by

triangulating your overall data position that you'll fully understand your data culture and the real extent of the risks and opportunities you are carrying.

Levels of data maturity vary considerably across the sector and it's quite typical to see a high level of manual intervention in the management of data and areas for improvement in relation to personally identifiable information. Asset and finance data has been better controlled than other types of data because of the areas of focus from the housing regulator, but it's critical that providers address their data risks in the round. This includes everything from reviewing ICT contracts to ensure software providers are robust in their management of data that's held in systems, through to upskilling executive boards so they know the right questions to ask.

We need to help the sector to move away from always looking at performance in the rear-view mirror to an approach that's more real time, and ultimately predictive and pre-emptive, so that better decisions can be made.

Kate Lindley is the service lead for digital and data at Socitm Advisory.



Predicting arrears with AI

Jordan Wheat, New Business Consultant, Crimson

Social housing tenants face rent increases in April 2022 of around £200 per household per year, alongside rising energy and food costs.

According to the Joseph Rowntree Foundation, 46 per cent of social housing tenants are living in poverty, equating to just under five million people across the UK. These increases in rent and costs of living will hit the most vulnerable the hardest, leading to further financial difficulties and debts. And with many tenants receiving housing benefit or universal credit, many of them are already living on the breadline before the expected price hikes.

Propensity for arrears

More tenants will find themselves in rent arrears during 2022 as the financial impacts of the pandemic catch up with the economy. But how can housing providers predict which tenants will go into arrears?

Predicting rent arrears isn't just beneficial for tenants, it also allows housing providers to prioritise tenant support, keep money coming into the organisation and learn more about tenants' behaviours and their particular circumstances. Patterns in behaviour can be monitored to prioritise support for those continuously in financial trouble, rather than needlessly chasing tenants who only go into arrears on one-off occasions.

What's the answer?

With numerous integration opportunities, Microsoft Dynamics 365 can create a rich, joined-up view of tenants' data which can be used to predict their behaviours. Dynamics 365 provides the core data housing providers need, including rent and arrears management. This data

can then be leveraged to predict future trends and spot previously-unnoticed patterns in tenants' behaviour. The CRM system also has intuitive segmentation and filtering capabilities, helping housing providers to analyse top-level arrears and rental data.

Intelligent caseloads

Pivigo, an AI service provider in the housing sector, uses AI-powered solutions for rent and arrears management. Using predictive analytics, Pivigo generates smart and intelligent caseloads for housing providers' income teams, with predictive algorithms helping to prioritise activity and achieve the best possible impact on arrears. Pivigo can also predict future arrears up to six months before they happen, thereby also enabling housing providers to create proactive, preventative strategies to support more sustainable tenancies.

Using machine learning, Pivigo can accurately predict whether a tenancy is in long-term arrears or not, allowing the assignment of an arrears risk score to each tenancy. This enables a data-driven approach to arrears, resulting in a considerable reduction in the risk of long-term arrears cases.

The rich tenant data in Pivigo is derived from Dynamics 365 – discover more about the importance of predicting rent arrears and how Dynamics 365 and Pivigo can create a data-driven housing provider at our next 'housing breakfast' webinar (see crimson.co.uk).

Jordan Wheat is a new business consultant at Crimson.

Sophos stops ransomware.

SOPHOS
Cybersecurity delivered.



Bristol City Council boosts rent collection by £1.3m with Mobysoft

Bristol City Council, with around 28,000 properties, has improved its rent collection by over £1.3m in the past year through a combination of Mobysoft's RentSense software and its complementary income consultancy service.



Mark Kempt, income and leasehold manager, Bristol City Council, said, "Our Mobysoft consultant, Nick Beasley, knew how to get the best out of RentSense and had expertise on how to build a high-performing team and embed it within a council.

"Our objectives were primarily better customer support, higher collection rates and maximising our income officers' usage of the system.

"Since installing RentSense, we've been able to focus on the right tenants at the right time. This has helped us to reduce arrears; our arrears have fallen in the past year by £177,000. Our collection rate is now 99.3 per cent, a 1.1 per cent improvement on the previous year, resulting in an increase in rent collections of more than £1.3 million.

"Mobysoft's income maximisation service was a huge bonus. We are changing our approach to arrears and income collection and having Mobysoft's knowledge and expertise on hand to support us has been great."

Mobysoft's Dataverse Connector available on Microsoft AppSource



Mobysoft has announced the availability of its RentSense Dataverse Connector on Microsoft AppSource, an online cloud marketplace for line-of-business solutions.

James Davison, chief technology officer, Mobysoft, said, "Now that our RentSense Dataverse Connector is available on Microsoft's AppSource, housing providers can use RentSense's 'recommendation data' as part of their Microsoft estates."

Toby Bowers, general manager for business applications, Microsoft, said, "Through Microsoft AppSource, customers around the world can easily find tailored line-of-business partner solutions that work with the products they already use."

Mobysoft appoints new CTO

James Davison has been appointed as the new CTO of Mobysoft, supplier of the well-established RentSense arrears prevention and management software.

Davison joins Mobysoft from the audio branding agency PHMG where he was CTO. Before that, he was one of the directors of technology responsible for ITV's successful digital transformation.

Davison said, "Mobysoft's 'tech for good' ethos, and how we clearly demonstrate benefits for everyone in social housing is hugely appealing. Mobysoft's existing technology stack, including machine learning, serverless computing and predictive analytics, presents some fantastic opportunities for innovation."



The European Market Leader
in **Home Life Safety**

THE CONNECTED HOME LIFE SAFETY SOLUTION

**CREATING SMARTER,
SAFER HOMES.**



Aico with HomeLINK offer a network of alarms and sensors to improve the health and safety of homes throughout the UK.

Find out more at:
**[www.aico.co.uk/
smart-home](http://www.aico.co.uk/smart-home)**



Fire and Carbon Monoxide (CO)

Our 3000 Series offers full circle Fire and CO protection, wirelessly connecting to the SmartLINK Gateway via Radio Frequency for remote whole-system data monitoring.



HomeLINK Environmental Sensors

Monitor temperature, humidity and Carbon Dioxide to gain insights into indoor environmental conditions to create better maintained, healthier, energy efficient homes.



SmartLINK Gateway and App

The SmartLINK App enables quick and easy installation of alarms and sensors with SmartLINK technology, while the Gateway is the central hub for data, extracting information from connected devices.



The HomeLINK Dashboard

Data is extracted from all connected alarms and sensors with actionable insights presented on the dashboard, segmented by high, medium and low risk.



The Resident App

With the HomeLINK Resident App, residents are provided with a healthy home rating, handy advice on how to improve the quality of their home, and Fire and CO alarm testing reminders.

Housing Insight's RentsConnect & Thenue Housing

Housing Insight has launched RentsConnect to revolutionise the way in which housing providers interact with their tenants.

Part of the software provider's PanConnect suite of products, RentsConnect replaces static weekly reports and temporary case notes with a system that lets staff communicate with housing management systems and other databases in real time and without duplication of data entities.

Katrina Heyworth, head of sales, Housing Insight, said, "Before the pandemic, housing officers were already facing challenges around liaising with their residents, particularly about arrears. Remote working then came in and many 'visits' had to be conducted by phone rather than in person, at a time when residents were more likely to fall into arrears due to furlough and the ban on evictions.

"With the introduction of RentsConnect, we wanted to make it easier for staff to do their job well, whether they were working from the office, their kitchen table or the tenant's home."

Keeping priority lists up-to-date

Housing Insight identified two areas in which they could make a positive difference. The first was to offer real-time updates to arrears' lists so that payments would be immediately visible and visiting priorities automatically updated.

Heyworth said, "Staff can now see at a glance when the resident they are speaking to last made a payment. They don't have to go back to the office to check the database after a visit or when they get off the phone.

"RentsConnect also helps to streamline staff diaries for the week because it moves residents up or down the priority list in real time, depending on when arrears payments are made or payments become overdue. Staff no longer have to work from a weekly report that becomes out-of-date



the minute it is issued, and the updates are automatic – there's no need to log in to see if anything has changed."

Connecting with the office

Secondly, Housing Insight wanted to make it easier for housing officers to interact with back-office systems when they were in the field. RentsConnect can be used online or offline, which is invaluable in areas with a patchy internet signal; the system automatically syncs the next time it reconnects, with all data encrypted and held securely.

Heyworth said, "We know that housing staff frequently use pen and paper to make temporary notes while they're out and about. When they return to the office, they have to type up their notes on to the back-office systems, but this is duplicated effort and also means that snippets of information can get lost.

"Using RentsConnect, all the latest information is available for each staff member to view on demand. Pre-populated forms can be uploaded and updates made directly to back-office systems from a mobile, tablet or laptop."

Understanding the 'why'

Depending on which modules are activated in addition to RentsConnect, housing staff can view additional information that may help to explain why the resident they are visiting is in arrears or on the edge of non-payment; for example, owing to issues with universal credit or outstanding repairs.

Heyworth said, "Our system makes it easier for housing officers to differentiate between those who can't pay and those who won't pay. When somebody chooses not to pay, it's often because there is an underlying issue; identifying that issue can provide an opportunity to move the situation towards a resolution."

NEC Housing

BRIGHTER THINKING FOR HOUSING



Welcome to the future of digital housing management

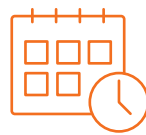
Blending the latest tech with deep housing experience, our digital platform is purpose-built for you. We've invested over £29m and counting in the latest innovations so you can do things differently.



Work remotely with
REMOTE ASSISTANCE
for live streaming



Work smarter with
ACCOUNT ANALYTICS
for a full picture of arrears



Work on the go with our
SCHEDULER for a dynamic
and adaptable approach



Work centrally with our
RISK MANAGEMENT to maintain
the golden thread of data

**Are you looking for a low code, single, open platform that's easy to deploy in the cloud?
Look no further than NEC Housing. It's built for your tenants. And it's built for the future.**



necsws.com

Orchestrating a brighter world

NEC

The customer experience

Gary Naylor, head of housing, Thenue Housing, said, "Our staff can offer residents a better level of service because they've more information available to them. They can now process payments, make notes and arrange meetings on the spot, from anywhere.

"We've found Housing Insight to be more flexible than other providers because we've worked out how best to use its system in the field. Some of the out-of-the-box functionality immediately made us more efficient, and we've also asked for a few tweaks to fit our existing working practices that we didn't need to change.

"Working with Housing Insight has helped us look at how we operate across our whole business, particularly when it comes to updating and integrating content with our main database. From estate issues to signing off repairs, there are numerous ways in which we can develop our relationship further. We're planning to do three projects with Housing Insight this year – that's two more than we expected because the implementation process is so fast."

Queens Cross Housing takes on RentsConnect

Queens Cross Housing is now using Housing Insight's RentsConnect software alongside its earlier implementation of the software provider's PanConnect

Staff app to manage its voids, so that all staff can be connected to data in a single easy-to-use system.



Gary Naylor,
Head of Housing,
Thenue Housing

Housing Insight said that adding RentsConnect will enable the housing provider to see its priority visits in order and then complete actions in the field via digital forms, with the outcomes written back to the main housing management system.

Elizabeth Hood, deputy director of neighbourhood services, Queens Cross Housing, said, "The benefits of having an integrated system providing real-time information for our staff in the field as well as in the office alongside the additional functionality of RentsConnect will make our processes much more efficient."

CUSTOMER MANAGEMENT



Link helps tenants get connected

Link Group has helped almost 800 low income and digitally-excluded households across Scotland get online by distributing iPads, Chromebooks and mi-fi (personal hotspot) units across 14 local authority areas since 2020, alongside training from 'digital champions'.

Ken Fox, director of digital services, Link Group, said, "It has been incredible to work with our partners and the Scottish Government to ensure our tenants, particularly those who are vulnerable and isolated, have access to digital services.

"The pandemic highlighted how important it is that people can connect digitally, and the impact this project has had on people's lives has been transformative."

The rollout of the hardware devices and training was made possible by Connecting Scotland, a Scottish

Government initiative managed by the Scottish Council for Voluntary Organisations, set up in response to the pandemic.

One of the first areas to benefit was LinkLiving's older persons' service in Fife where Link's staff distributed iPads to over 65s so they could join in with weekly 'digital social cafes'.

One participant said, "I really enjoy the digital cafes. At first, I wasn't sure because I'd never used an iPad before, but I was given lots of help. It really gives me something to look forward to each week."



panconnect

THE APP FOR YOUR CUSTOMERS AND STAFF

MODULE SPOTLIGHT

RentsConnect



STAFF
APP

A fully integrated module that manages all aspects of customer arrears. The module analyses customers payment behaviours to identify which customers need to be contacted and prioritise these customers for you in a list that can be further sorted and filtered even when no internet signal is available. Real-time updates mean that your list is always up to date and using our workflow tasks engine, the process of speaking to the customer and helping them manage their arrears can all be organised through PanConnect.



Giving your residents the ability to
take control of their own arrears



SELF-SERVICE
PORTAL & APP

VISIT US AT

housing-insight.co.uk

TO ARRANGE A DEMO

 housinginsight



Social housing gets in on the app

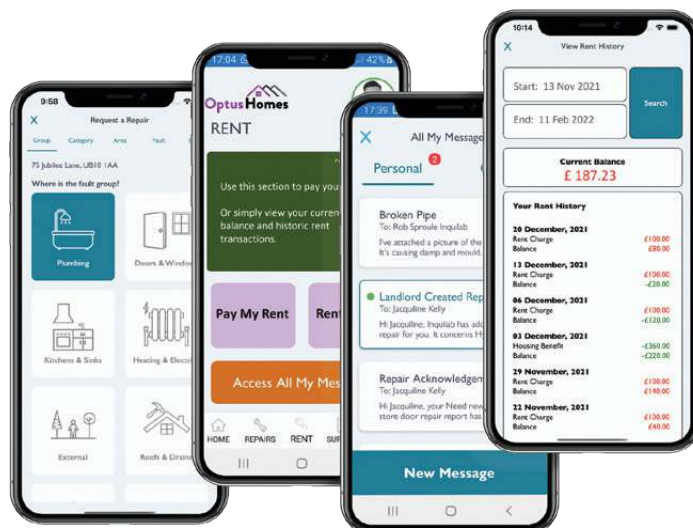
Gerry Kelly, CEO, Optus Homes, and Danny Vant, Client Services Director, PayPoint

If you don't have a genuine mobile app for your tenants, you're falling behind in the fourth industrial revolution, when digital domains are blended with offline reality. A web portal will no longer cut it in 2022 – the world has moved on in the past two years, thanks to the pandemic accelerating innovation and digitalisation. In the UK, mobile penetration is reported to be at 98 per cent, significantly higher than computers, laptops and tablets combined.

Another important figure is that 85 per cent of online mobile phone usage is via apps, not browsers. Optus Homes found that consumers don't want a web portal; instead, tenants want a powerful and intuitive app designed around their needs, not what makes a housing provider's life easier. A tenant app such as the one Optus Homes unveiled at the Housing Technology 2022 conference is system-agnostic and will integrate seamlessly into housing providers' existing HMS and CRM systems to deliver a powerful solution for tenants that improves efficiency and lowers costs for the housing provider.

App or portal?

Gerry Kelly, CEO, Optus Homes, said, "We strive to be client centric and we add features to the app only at the request of housing providers. For many tenants, their mobile phone is the only internet-connected device they have, meaning they need easy access to services simply and conveniently. Mobile is today's super tool and consumers expect and demand instant access via powerful and intuitive solutions that they recognise and trust, and that means a genuine native mobile app.



"On the other hand, a tenant portal is a website, and while it can be made to be responsive so that it plays on a mobile, it is still only a website. A tenant portal's design is always a compromise because it needs to be suitable for laptops, tablets and mobiles, so it's never really optimised for any single device. In contrast, a genuine mobile app can deliver a wider range of personalised solutions than a web portal and is also a simple, convenient and secure way for tenants to take control of paying their rent."

Is Your Data Holding You Back?

IntoZetta's unique combination of software and expert professional services is providing organisations across the housing sector with solutions to their data problems.

Trusted by:

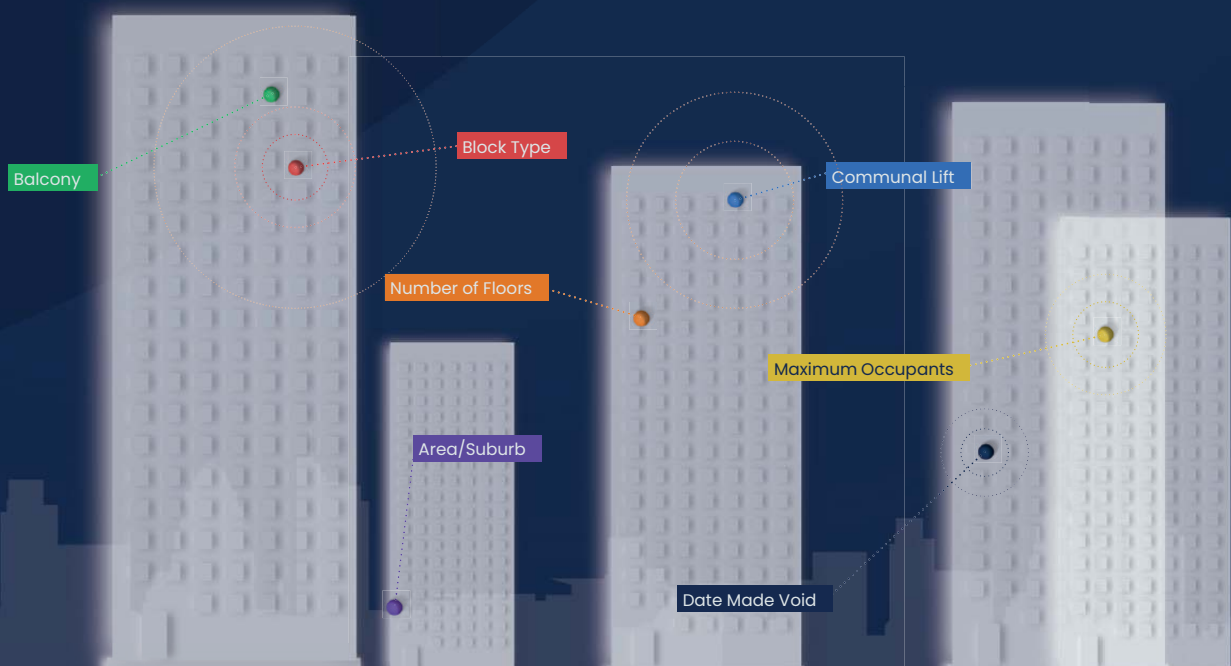


INTOZETTA QUALITY FOR HOUSING

With over 1000 pre-configured housing data quality rules, we can create a complete picture of your organisation's data quality within a few weeks. The Rules Library contains housing specific rules for Asset, Tenant, and Finance data as well as specific data reporting requirements for NROSH. The software allows rules to be grouped into business processes so that you can measure your ability to Maintain Assets, Collect Rent, Communicate with Tenants, and all other key processes.

INTOZETTA GOVERNANCE FOR HOUSING

Pre-configured with 100s of common housing data definitions that you can Accept or Modify to create your organisation's Data Catalogue. The software allows you to build a comprehensive picture of where data exists, how it moves between systems, and where the Master source is held. You can manage data ownership, data policies, and provide your employees with an intuitive Data Search capability that democratises data and drives a wider appreciation of good data governance.



Simplifying payments

In our sector, the tide has turned regarding how banking and payments are carried out, with the focus nowadays on helping tenants to manage their finances better if they find themselves in difficulties and less able to meet their rental payments.

Kelly said, "Before developing our tenant app, we gathered the opinions of both tenants and housing providers and then built an app with those needs at the centre. An integral part of that was a requirement for simple, streamlined and secure rent payments. We found that working with PayPoint would let us integrate enhanced payment solutions within our app, offering tenants instant access to PayPoint's MultiPay solution. With self-serve options, MultiPay offers the ultimate convenience and peace of mind for tenants, as well as increased efficiency, reduced costs and minimal integration requirements for housing providers."

Through MultiPay, the app's native payment solution, Optus Homes lets tenants pay their rent and manage arrears payments directly in the app, on the phone, or over the counter in one of the 28,000 local retailers in the UK-wide PayPoint network.

Collaborating for simplicity

Optus Homes and PayPoint are now working closely together to bring enhanced payment solutions to the social housing sector.

Danny Vant, client services director, PayPoint, said, "Our technical partnership with Optus Homes has allowed us to build a bespoke payment solution to meet the needs of both tenants and housing providers. Optus Homes has a branded digital payment solution that can provide real-time, end-to-end visibility of digital and cash payments. As

well as making the tenant journey simpler, MultiPay offers streamlined reconciliation for the housing provider, all without any upfront capital costs."

Removing complexity for housing providers

PayPoint is well-known for giving people access to quick and convenient bill payments, mobile top-ups and money transfers. Through its network of 28,000 retailers across the UK, PayPoint serves millions of customers every week.

Through pioneering retail technologies and omnichannel payment solutions, PayPoint has created a one-stop shop of customer payment options which help housing providers reduce the cost of rent collection, increase arrears payments and add value to the overall customer experience. Working with Optus Homes, PayPoint is increasing financial inclusion and convenience for tenants and removing complexity for housing providers.

Convenience for tenants

Working with Optus Homes, PayPoint has developed a payment solution that integrates direct within the app for ultimate ease and accessibility. Tenants can make payments instantly through the app, over the phone or in a local shop.

Alongside managing their rental account, the Optus Homes app allows tenants to report repairs and book appointments. Additional features are added every quarter, driven by housing providers' requests and suggestions.

Gerry Kelly is the CEO of Optus Homes and Danny Vant is the client services director at PayPoint.



Walk before you can run

Stephen Hall, Managing Director, Active Housing by Hallnet

As a father of three children, I often find myself suggesting (or shouting), "walk before you can run", usually to prevent accidents!



This saying is also relatable to software development and IT projects; I believe some housing providers make the mistake of trying to run before they can walk when it comes to customer portals or similar self-service software.

Endless features and requirements

I often read portal tender documents containing pages and pages of requirements that tend to be simply every idea ever mentioned in a planning meeting, rather than validated requirements through engagement with key stakeholders. Another common scenario is an organisation having a fully-functioning portal but delaying any launch (even a beta launch or any marketing) because they think that they need more features.

So what's behind this 'run' (as opposed to 'walk') mentality? While I'm sure there are lots of organisation-specific reasons, I think the housing sector as a whole compares itself with the Amazons, Googles and online banks of the world and sees itself as being far behind. As a result, our housing peers can feel the pressure to 'run' to catch up with the private sector, notwithstanding the fact that our comparisons are with global behemoths with staggeringly large budgets.

First, I think we're too hard on ourselves. Every week, at least one housing provider tells me that they want their customer portal to be like an online bank; there is a perception that banks have got it spot on and they are the standard for self-service. However, according to a recent study, 28 per cent of complaints to digital-only banks were related to their app or website, and 53 per cent of digital banks' customers felt negatively about their provider during lockdown. Based on these stats, it's fair to say that even the online banking world has its fair share of issues and needs to improve continually.

Hype vs. reality

The second mistake is focusing primarily on the things these organisations talk about in the media, including AI, self-driving cars, drone delivery and robotic warehouses. While these innovative areas can be exciting, most of their successes come from more mundane areas such as the ease of use of Amazon's shopping basket and the

performance and accuracy of Google's search – things that we are so familiar with now that we take for granted.

I've no doubt that, at an intra-company level, these core areas enjoy most of the corporate focus and budget and, while being conscious of these advances in technology, with the money these large corporations invest, it's always going to be hard (impossible might be a more realistic term) for housing providers to keep pace. It's my belief that while these ideas can provide inspiration for housing providers' trajectories of travel, the housing sector needs to be wary of such distractions and focus on its core areas.

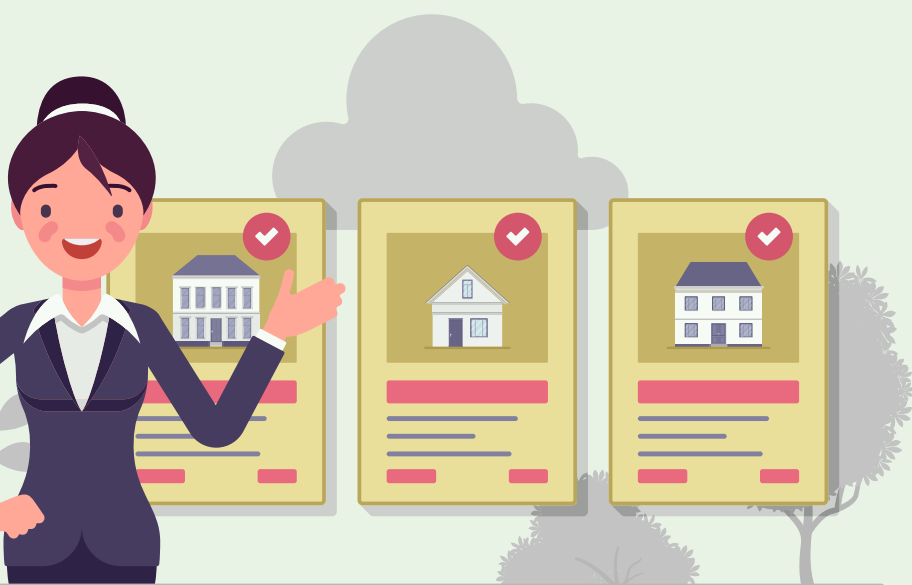
What's the answer? It's likely to be different for each organisation, but I'm a strong believer in taking an agile approach to a customer portal project, whether a completely new project or when replacing an existing portal. This gets the portal in the hands of real users as soon as possible, enabling continual improvements over time. Remember, improvements are not just about features but also about UX enhancements.

The big-ticket items

Where to start? For a customer portal, it's hard to argue against the two big-ticket items (finance and repairs), and those most requested by tenants to manage their financials, including paying their rent and rent statements as well as reporting and managing repairs.

Those two self-service areas in housing generally account for 80 per cent of inbound calls. Making portals easy to access and using a common sense, intuitive approach to self-service navigation, will encourage a much higher adoption rate than providing ten shiny new services, where repairs and financials are compromised in any way.

Stephen Hall is the managing director of Active Housing by Hallnet.





Focus on people, not processes

Trevor Hampton, Director of Housing Solutions,
NEC Software Solutions UK

Trevor Hampton, director of housing solutions at NEC Software Solutions UK, explains why putting the emphasis back on people rather than processes will drive tenant engagement and build trust.

The human connection

"The biggest single problem in communication is the illusion that it has taken place" – George Bernard Shaw's quote is more applicable than ever now that much of our communication is not face-to-face these days but online.

For some people, sending a message or a request into cyberspace is rather akin to putting a message in a bottle and hoping that it will wash up on the right shore; contactless communication involves a high degree of trust and the need to remove uncertainty.

Although the digital revolution took place over three decades ago, not everyone is a digital native or comfortable and trusting of technology. It's therefore worth bearing in mind that although we are all technically more connected than ever, not everyone is on the same (web) page.

This is particularly true for your tenants, who can be more vulnerable than others and who might need more personal support to help them navigate difficult personal circumstances. They may need more reassurance and signs of encouragement that they are being heard and listened to. They may also be harder to engage with if they feel there is no one on the other side of the screen who 'gets them' or wants to get them.

One way for tenants to feel connected and a part of the process is to ensure all your communication channels are joined up and integrated, that there are no leaky pipes so to speak. Then there's less chance for a wrongly

disconnected call about anti-social behaviour or a report about a fire hazard to appear 'resolved' and in need of no further action, when a DM about it on social media has been overlooked.

Building trust

Tenants need to feel confident when they contact their housing provider, that their rent query or repair request isn't just going into a black hole but will actually be dealt with by the organisation. Counterintuitively, offering multiple channels for tenants to make contact can inadvertently exacerbate the 'black hole' feeling if those channels aren't all threaded together. This can leave tenants feeling that they aren't important or being listened to.

And nothing breaks trust down faster than tenants who feel that they or their problems are being ignored; they wouldn't think, "my broken boiler still isn't fixed because the record of my phone call hasn't been linked to my online portal request." They would just assume that their housing provider didn't care.

Meaningful engagement requires a fully-integrated approach so that a two-way relationship based on trust and understanding can be built. This is only achieved when all the correspondence is joined up, giving housing providers the 360-degree views that all effective engagement and understanding requires.

Better insight

While there's always been an abundance of data in our sector, it hasn't always yielded rich insights. That has



changed over time as housing providers have started to take less siloed approaches to data collection and sharing at the same time as advances in machine learning have made it easier to spot patterns and trends at scale. This has helped ensure problems are picked up and alerts are sent in real time, generating confidence and trust.

Advances in technology mean it's now more possible than ever to get to know your tenants and your housing stock in much the same way as the 'patch managers' did in the 1980s, enabling housing officers to arrange early interventions when and where they are needed most. Above all, understanding tenants and their individual situations is fundamental to fostering engagement and satisfaction.

Context is key

A unified communications platform provides a fuller picture for housing providers so that they can see any concerns, queries or repair requests in context. A repair request from a 75-year-old tenant with a health issue needs to be flagged and dealt with faster than a similar one from a tenant in their 20s, for example. Having a holistic view of tenants means providers can manage relationships better and provide the appropriate responses.

A fuller picture also enables housing providers to take a far more proactive and preventative approach to repairs and maintenance. A call out to a leaky roof could also be an opportunity to service the boiler because by having access to all the tenancy information, the housing officer

would be able to see that there were also calls from the tenant about this. This would help the tenant feel supported and help sustain them in their home, building a stronger relationship.

A two-way process

To be fully effective, communications with tenants need to be based on mutual trust and understanding. People aren't one dimensional; many tenants have complicated lives and chaotic personal situations to deal with that require the kind of empathy and consideration not solvable at the push of a button. For that you need the human touch.

Trevor Hampton is the director of housing solutions at NEC Software Solutions UK.

North Wales Housing first in Wales to launch Futr's AI chatbot



North Wales Housing has become the first housing provider in Wales to launch a conversational AI chatbot from Futr. The chatbot, named Huw, sits on the website and is designed to answer a range of tenant queries at any time in just a few clicks.

Since its adoption, Huw has improved tenant engagement and access to services in both English and Welsh, with the latter being spoken by around 900,000 people across the country.

Within the first five months of launching Huw without any promotion, the bot has automated 1,200 questions with an average response time of 1.8 seconds, equating to an average saving of £7,000.

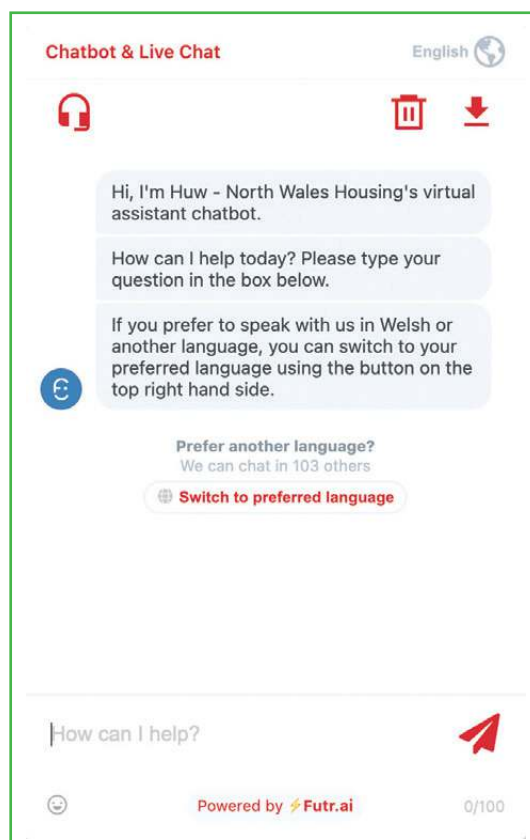
Brett Sadler, operations director, North Wales Housing, said, "Huw's built-in auto-translation between English and Welsh makes the service as inclusive as possible for Welsh speakers. We already offer telephone services in both English and Welsh, but the addition of the Futr chatbot offers an additional digital touchpoint for tenants."

In addition to the AI-powered chatbot, North Wales Housing is also using Futr's live-chat system which triages and, where applicable, escalates urgent queries to a human agent.

Andy Wilkins, co-founder and CEO, Futr, said "North Wales Housing is setting a new standard for tenant engagement and experience especially for native Welsh speakers. Being able to provide services in Welsh is particularly important for the North Wales region of Gwynedd where 75 per cent of people identify as Welsh speakers. With the implementation of Huw, the housing provider is democratising its services and freeing up its employees to focus on more complex challenges."

The chatbot was tested, trained and reviewed for a month, including testing with both staff and tenants, to ensure that the auto-generated Welsh dialogue flows were accurate.

Sadler said, "We spent a lot of time during the testing phase making sure that the Welsh translation option would be accurate enough for our customers. This included extensive testing from fluent Welsh language staff within the organisation. We were always clear that we would not sign-off on the new chatbot solution without assurance that the Welsh language option would be accurate."



littlefish

managed IT services



LET US SUPPORT YOUR BUSINESS

SO YOU CAN FOCUS
ON SUPPORTING
YOUR CUSTOMERS



Welcome to our world of service excellence

We are a world-class, award-winning Managed IT Services, Cyber Security and Cloud Solutions provider, all delivered from our 24/7 UK service centres.

Through successful investment in our people and technology we have become an established alternative to the large Multi £Billion Managed Service Providers and IT Outsourcers.

We focus on delivering real business outcomes for our customers across our Managed IT Services, Cyber Security and Cloud Solutions including AWS and Azure, all whilst maintaining an environmentally sustainable business to help protect future generations.

If you would like to discuss how our world-class Managed IT and Cyber Security Services can help enable your business to focus on what it does best, get in touch today.



MANAGED IT SERVICES

We provide market-leading Managed IT Service solutions that fit flexibly around your business's exacting needs.



CYBER SECURITY

Littlefish cyber security services empower you with the strategy, tools and resources to combat ever-evolving cyber threats.



CLOUD SOLUTIONS

Our Microsoft Azure, AWS, O365 and Cloud Services portfolio enable centralised management whilst allowing you to access data from multiple devices 24/7.



IT CONSULTANCY

We'll turn our expert eye to your business needs, helping to deliver tangible business improvement with minimal disruption.

littlefish.co.uk
info@littlefish.co.uk
0344 848 4440

SCAN TO SEE HOW OUR
MANAGED IT SERVICES CAN
HELP YOUR BUSINESS GROW





Real-time translation and interpretation in housing

Joe Miller, General Manager, Pocketalk

Language barriers will adversely impact the experience of any service. Language is not only a medium of communication, but also linked to an individual's identity. We believe that everyone has the right to fair treatment and equality of opportunities, and this is crucial in the housing sector given its role in helping people build communities and settle into an area.

Having recognised that tenants and employees in the housing sector come from diverse backgrounds and have varied native languages, we have partnered with Together Housing to help it overcome some of the language challenges that it faces.

Isolation and misunderstandings

Language differences can result in misunderstandings, feelings of isolation and a lack of rapport. If the housing sector is to deliver on any kinds of diversity and inclusion commitments, it must consider any technologies that can help. Together Housing began using our Pocketalk device in 2020 and it has had a huge impact both internally and externally.

Tahir Idris, diversity & inclusion lead, Together Housing, said, "To put the issue of language barriers into context for our organisation, around 25 per cent of our residents are from non-White British backgrounds. In fact, as many as 27 other languages are spoken in our neighbourhoods.

"Urdu, Polish, and Arabic are some of the most prevalent languages among our communities. We also have languages as rare as Tigrin, Oromo, Shona, Aramaic, and it's those people who speak minority languages that can often suffer the most inequalities and challenges.

"Together Housing is proud to offer those who don't speak English a range of options to help communicate with our teams. The tenant's voice is more important to hear than ever before, not least after the events of the Grenfell tragedy, and we ignore it at our peril."

Traditional phone-based services

Most housing providers understand that they are duty bound to provide interpreting and translation services. Many of them use traditional, phone-based interpreters, just as we've done for many years. These are understandably popular because they only need low-tech skills and they use the humble telephone.

On a traditional 'interpret and translate' call, the interpreter acts as a go-between the housing officer and the tenant to ensure both parties are understood. Despite everyone's best intentions, the conversations tend to be stilted and rather stop-start in terms of flow.

A 20-minute call costs around £30, but the overall cost can mount up during the course of a busy year, whereas Pocketalk is a one-off cost so there's no further cost the more you use it, which Together Housing described as its 'killer advantage'.



82 languages

Over the past year, Together Housing has used Pocketalk for immediate and accurate translations of up to 82 languages, something that it would find impossible to do manually.

Pocketalk uses wi-fi, mobile data or a personal hotspot to provide language translations in real time, via either a dedicated device or app (announced for 2022). All users do is press a button as they speak; when they've finished speaking, Pocketalk provides an immediate translation.

Local integration

Together Housing recently explained how, when running a course to help a group of Syrian refugees integrate into the local community, Pocketalk had been an essential aid in greeting and starting conversations with the Syrians on the course.

Providing a positive experience during an unsettling time is so important; Pocketalk can help to break down barriers via easier, faster and more authentic translation.

Joe Miller is the general manager of Pocketalk.





Mobile first, mobile native and beyond

Jack McLean, Product Marketing Manager, Aareon UK

I first heard the term 'mobile first' not long into my software career while working for an ecommerce provider. At the beginning of the transaction journey, there was an ever-growing trend that consumers were no longer searching for products and services using desktop computers, instead using mobile devices.

This was predominantly down to the evolution of smartphone technology but also down to the new and emerging use of social media advertising. This subsequently fuelled the need to build 'device responsive' web technologies for ecommerce and service providers' websites, with a mobile-first approach to design, optimising web pages for mobile to help drive transactions. Furthermore, this meant that digital advertising agencies had to move towards advertising with a mobile-first directive, flipping common processes and practices on their heads.

Moving to mobile

The tools used to facilitate the running, analysis and building of software and advertising evolved too. Throughout the 2010s, it was common to see software frameworks, user interfaces, and the tools within, changing to cater for mobile. A good example of this was Twitter, leading the way with its responsive Bootstrap software framework developed mid-2010, which is now one of the most used software frameworks available.

The trend is becoming equally as important and more prevalent in business software tools, increased further by the massive culture shocks rippling through society because of the pandemic.

Now more than ever, businesses must enable mobility throughout their workforce to enable staff to work anywhere, anytime. Without mobility in software, it would have been impossible for many businesses to have continued to operate over the past two years. In essence, the same principles apply for business tools as they did for ecommerce in the 2010s; it's not only selling

software that's subject to a mobile-first approach but also the software solutions we use for our everyday business processes. This includes the ever-evolving trend of accessibility, itself intrinsically linked to mobility.

UI/UX best practice

When developing new solutions, software providers must optimise those solutions for mobile delivery and make business processes just as easy to do as they would be from a desktop. This has been made easier by a decade of research by some of the leading technology companies, meaning that a generation of UI/UX designers have learned mobile-first best practices for user interfaces, based on research from wide-ranging studies with enormous budgets; for example, it's generally thought that Apple focuses primarily on UX research, not market research.

The rapid evolution of handheld devices, with the increased demand for accessibility and mobility for business tools, is accelerating the 'mobile native' trend, which is mobile-first by design, but more importantly, resulting in software built specifically for mobile devices, with desktop compatibility a secondary consideration. Confirmation of the importance of this trend in our sector has been demonstrated by the uptake in Aareon's Versaa mobile platform, released last year.

Central source of truth

Mobile-enabled software allows us to have integrated systems and solutions, meaning that housing staff can support their communities via mobile devices, requesting data straight from systems that hold the central source of truth for their tenant or property. Supporting tenants where

and when they need it most means that housing providers need to invest in mobile solutions, digitising all business processes where possible.

Digital and environmental transformation programmes are both intrinsically linked to the need for mobility in software, directly related to impending carbon neutral targets being imposed by the end of this decade. Housing providers therefore need the flexibility to build their own mobile working solutions, without dependencies on software providers. In turn, this is driving the adoption of low/no-code platforms, enabling the creation of mobile-working solutions for any commonly-used mobile device.

Mobile-first design and mobile-native software are both central to everything we do in our working, social and family environments. It has been exciting to see how technology has evolved to meet the demands of this trend and how the mobile-first and mobile-native approaches have driven innovation in software globally as well as housing-specific developments.

Jack McLean is the product marketing manager at Aareon UK.



Amey Secure Infrastructure has selected Fast Lean Smart's Visitour software to optimise the scheduling of 150 operatives servicing 22,500 properties on Ministry of Defence estates.

FLS will provide real-time scheduling software to improve the service experience at military homes, including heating, electrical works and repairs. The FLS software includes a self-service portal with text/email notifications for customers, real-time GPS tracking for operatives and advanced reporting to optimise scheduling.

David Smith, group digital transformation director, Amey Secure Infrastructure, said, "Working with FLS will help us

to achieve a step change in customer experience, both for the military families using our services and for the tradespeople delivering them. It will improve the accuracy and transparency of our day-to-day operations and generate additional data to optimise our future services."

NEC Housing transforms Reading's repairs

Following Reading Borough Council's implementation of NEC Housing to improve its end-to-end repairs processes by keeping everything in one place, the council's project manager, Johnnie Stanley, explains why this 'all in one' approach matters.

What's different about repairs management in NEC Housing?

Stanley said, "Reading's current solution only extends so far. We've a separate repairs system and then lots of other tasks and services in other databases. The new NEC system will help amalgamate that data to improve visibility and allow us to pull information together quickly."

Why the council made the change

Stanley said, "With multiple systems, it can be really hard to get a co-ordinated view of all the problems needing to be resolved.

This new approach really helps to give us a complete overview of all our tasks and where responsibilities lie; extending NEC Housing into more areas is by far the best option."

Far-reaching benefits

NEC Housing has replaced eight of the council's old systems, resulting in huge opportunities for improvement.

By adding NEC Housing's Contractor Management, Scheduling and Mobile Repairs software, the council expects to reduce its volume of repairs calls via tenant self-service, decrease

turnaround times for voids, enhance productivity using NEC's mobile app, boost customer service with SMS reminders and alerts relating to each repair, and improve data quality as a result of fewer manual processes and rekeying errors.

Complete repairs management

Stanley said, "NEC Housing Contractors is the right choice for us. By taking a 'one-system' approach, we can push the benefits out to every team."

Totalmobile buys Working Time Solutions

Totalmobile has just completed its acquisition of Working Time Solutions (WTS), a Manchester-based provider of shift planning, rostering and workforce management software.

The WTS SaaS-based solution enables organisations to ensure the right resources are available at the right time, in order to increase capacity and productivity, while supporting employee wellbeing and compliance.

The deal involves 60 organisations and 30,000 WTS users joining Totalmobile's customer base of over 1,000 organisations, including numerous housing providers. Totalmobile will add WTS's shift planning, rostering and workforce management capabilities to its existing rostering solution, Totalmobile Organise.

The addition of WTS's technology will add a multi-tenanted, modular workforce planning capability with SaaS deployment options. The key features of the WTS software include: shift pattern design to maximise productivity by aligning to demand and capacity forecasts; rostering and scheduling features that assign staff to shift patterns in line with regulations, working practices and business demand; and employee self-service for shift bidding, shift swaps and letting employees manage their time via their own devices.

Jim Darragh, CEO, Totalmobile, said, "Managing operational resources efficiently is more important than ever to our customers as they battle staff shortages, sickness and absence. By bolstering Totalmobile's rostering software and shift pattern capabilities, we can help organisations keep their services running smoothly, efficiently and with minimum disruption to the customer experience."



More IQ & Propeller Powered partner for scheduling & compliance

More IQ and Propeller Powered have announced a collaboration to offer, respectively, dynamic job scheduling and compliance management via a single user interface.

More IQ specialises in reactive scheduling and optimisation software for housing providers' mobile workforces, while Propeller Powered focuses on compliance management across all areas of statutory compliance including fire safety, gas and electrical.

Dave Carr, managing director, Propeller Powered, said, "This partnership means that integrated scheduling is now available to housing providers that haven't previously had budgets for it, so teams in the field and support staff can

work as efficiently as possible without the need for an entirely new system or significant additional spending."

Nick Shipton, managing director, More IQ, said, "This collaboration allows both companies to offer the broader functionality that the housing sector needs, for the very first time. Faced with a skills shortage, and constant budgetary constraints, we're confident that our collaboration will be a welcome offering to many."



Community Housing streamlines repairs with Civica Cx

Community Housing is now using Civica's Cx Housing and Contractor Workforce software as a single repairs platform to help it manage its responsive, planned and voids work.

Andy Willetts, head of digital and project management, Community Housing, said, "With an average of 18,000 repairs logged each year, our contact centre team and planners can now review and set a repairs appointment at the first point of contact. Customers receive their appointment details via SMS within seconds."

Around 35 Community Housing operatives use the Cx mobile app, allowing them to receive, update and

complete tasks on- and offline as well as managing and replenishing their van stocks via e-trading with Travis Perkins.

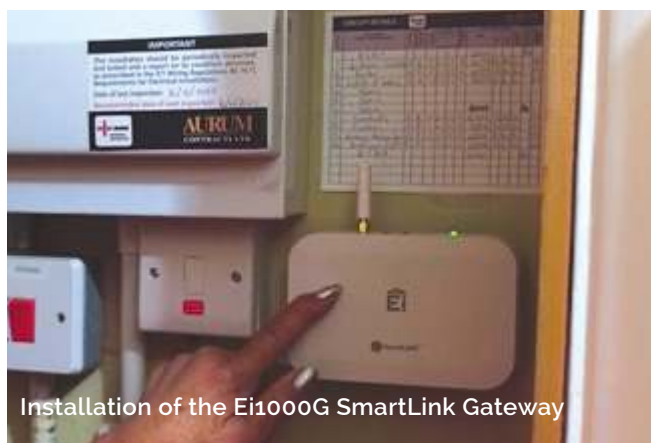
Willetts said, "The collaboration between our respective 'go-live' project teams has been an absolute pleasure. Both teams have shared a genuine team spirit and a true sense of partnership."



Barnet Homes & Aico: IoT & industry 4.0 compliance

Chris Jones, CEO, HomeLink

As of November 2021, Barnet Homes has over 3,000 properties connected to the Aico-HomeLink IoT platform, accounting for 20 per cent of its total housing stock. The technology has demonstrably saved people's lives and generated net savings. Following a smooth roll-out, Barnet Homes has confirmed it will complete a full roll-out of 15,000 homes by 2025.



Installation of the Ei1000G SmartLink Gateway

For every £1 invested, at least £2.70 will be saved

A comprehensive business case identified cashable savings of £8.9m. There were also further safety, compliance and reputation-related savings of £16.9m but these were not included in the business case in order to take a conservative approach. Some examples of the savings include:

1. Increased asset lifetime

The average time an alarm spends on the ceiling is estimated to be seven years. This is short of the 10-year recommendation given by most reputable manufacturers because contractors, installers and asset managers err on the side of caution when replacing devices to decrease the risk that alarms go out of date on the ceiling.

The main examples given are for EICR tests; because these are five-year cyclical programs, alarms found to be over five years old are automatically replaced to

prevent them from falling out of date prior to subsequent visits. While this approach improves compliance, it can be more financially and environmentally costly. The Aico-HomeLink platform provides transparency about average alarm replacement ages and provides asset managers with complete transparency of alarms that are out of date, greatly reducing non-compliance risk while enabling a data-led, strategic and targeted approach to replacements.

2. Reducing visits

Physical annual smoke and CO alarm tests are often no longer needed. While most of these checks were completed concurrently as part of gas servicing, there are still costs associated with them.

3. Improving safety and compliance

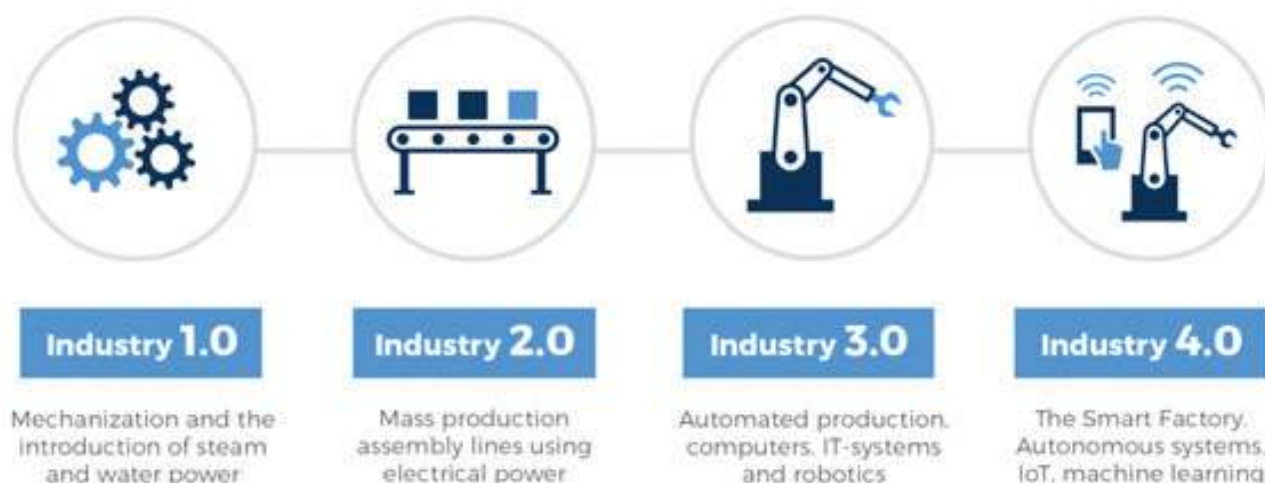
Improvements include better compliance reporting, reduced risk of fines, reduced legal expenses, fewer and more efficient repairs/callouts, and lower probability of reputational costs associated with accidents resulting in a near-miss, injury or death.

Gavin Bass, senior compliance manager, Barnet Homes, said, "We suspected that this product could improve our services from an early stage and, after a small pilot, we committed to a sizeable initial deployment to really test the system. There are now many people within Barnet Homes using this system and as we roll it out across our entire stock, it has become business as usual."

Lifesaving impact

Peter Chapman, project manager for fire safety, Barnet

The Four Industrial Revolutions



Homes, said, "We received a CO alarm notification followed by an alert that the alarm had been removed. We sent an engineer who immediately disconnected the cooker and reported the highest recorded level of CO he had seen in his career. It was extremely lucky that no one died as a result. Surprisingly, the resident didn't realise it was a CO alarm and had been doing this for some time."

Based on conservative metrics, the business case is strong, but the primary motivation for Barnet Homes is the potential to improve the safety and healthiness of its residents' homes. For example, by the time 1,000 homes had been connected, Barnet had already identified three homes that had low levels of carbon monoxide and one home that had high levels. In every case, the housing provider immediately sent an engineer to fix the problems.

Barnet Homes' Bass said, "Carbon monoxide was already required as part of the Homes (Fitness for Human Habitation) Act 2018. We now have a legal and moral responsibility to ensure that our homes are free from CO and CO alarms will soon be a legal requirement. We can also see IoT solutions such as this becoming a legal requirement in future because it's the difference between ticking boxes and assuming you know, and actually knowing 100 per cent. In reality, this means saving money and lives and we have seen the reality of this already."

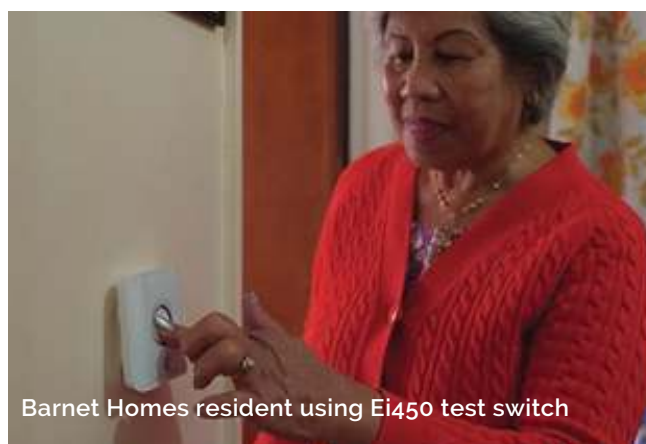
Compliance 4.0

Industry 4.0 refers to a new phase in the industrial revolution that focuses on interconnectivity, automation, machine learning and real-time data. It has already transformed many other sectors, from manufacturing to automobiles and aviation. Cars or jet engines without data analytics and sensors are now rare and homes are rapidly following suit.

While Barnet Homes leads the way, many other housing providers are on the same trajectory for IoT adoption. This is more evidence that industry 4.0 has arrived for housing providers in the form of compliance.

"Knowing that my home safety systems are connected to Barnet Homes gives me peace of mind"

Florida, Barnet Homes resident



Barnet Homes resident using Ei450 test switch

To date, Aico-HomeLink has already brought online IoT solutions for nearly 14,000 social housing properties in the UK and this number is growing all the time. Based on feedback from customers who are currently scaling this technology, Aico-HomeLink will have at least 50,000 live homes by the end of 2022 and 750,000 by the end of 2025. There are currently over 20 large housing providers that have either reached full scale or are on the path to a full IoT roll-out.

Given the dramatic improvement in compliance that IoT sensors provide, this is clearly a 'horse to car' moment for our sector. IoT enables housing providers to know that they are compliant, not simply hope that they are. This is an evolution from the previous cascade of ticked boxes and reports to simply getting alerts when things go wrong

and being assured of compliance in real-time at all other times.

Some of the questions that can be answered much better with IoT, analytics and software:

- Are homes fitted to the right specification?
- Have the alarms been tested?
- Are the alarms 'in date'?
- Are alarms being replaced close to the 10-year mark?
- Have any alarms been removed?
- Are your homes free from CO?

The road ahead

The plan for Barnet Homes is to cost-effectively install the gateway in all homes by 2025 as part of its ongoing LD2 upgrades. Beyond this, its plan is to roll out the new HomeLink environmental sensors to at least 100 homes in the near future. These sensors will be essential in tackling several emerging compliance challenges covered in legislations such as the Homes Act 2018 (e.g. damp & mould, ventilation, thermal rating and energy efficiency). An additional benefit to Barnet Homes of having the Aico-HomeLink gateway installed across its stock is that it

would be very inexpensive and little effort to deploy these sensors across its 15,000 homes.

Barnet Homes' Bass said, "We can see huge value in the environmental sensors. From improving residents' health and wellbeing to ensuring we're compliant with things that are very difficult and expensive to measure such as the locations and causes of damp and mould.

"It is clear from the housing ombudsman's report that housing providers are expected to take a proactive approach to solve these problems; non-compliance will no longer be tolerated and legal claims for disrepair are likely to increase. The sector needs to get on its front foot and there aren't many options."

Chris Jones is the CEO of HomeLink.



Basildon Homes greener with energy-saving Goldeni



Basildon Council has become the first local authority to implement Morgan Sindall Property Services' Goldeni energy-saving software.

The Goldeni technology uses interconnected sensors to provide housing providers and tenants with real-time, actionable insights to help them ensure their properties are healthy, legally compliant and more energy efficient.

The platform collects data on internal environmental conditions, including temperature, air pressure, light levels, humidity and carbon dioxide. Goldeni also detects for water leaks and monitors electricity and gas consumption, and by using intelligent boiler

technology, it provides tenants with more efficient boiler operations.

Sensors from multiple properties communicate with external LoRaWAN gateways providing a smart-city-ready network of battery-operated devices. These gateways provide a wireless communications network and due to their unlicensed spectrum usage, they are more cost effective than traditional SIM-operated solutions.

The top five cyber security challenges in housing for 2022

Rowan Troy, Senior Cyber-Security Consultant, Littlefish



Cyber crime continues to be a pervasive problem for all businesses in the UK, including housing providers whose push to adopt digital services accounts for an increasingly large digital footprint. The estimated cost of cyber crime across the UK is £27bn each year.

Housing providers face unique cyber-security challenges in 2022, owing to several factors. First, the pandemic dramatically shifted the way we work and how cyber criminals operate, and we're still feeling the effects of this shift even as we return to pre-pandemic working practices. Second, digital adoption has also rapidly accelerated over recent years, expanding the threat surface and providing attackers with more avenues for exploitation.

One of the best ways to build greater resiliency against cyber attacks and protect your organisation from reputational damage is by familiarising yourself with the latest security challenges affecting housing providers.

1. Hybrid working is now the norm

Employees are increasingly encouraged to take advantage of cloud-based tools which allow them to work from anywhere and only come into the office when necessary. While this shift was already taking place in many UK organisations pre-pandemic, it was accelerated massively by the 2020 lockdowns.

Two years on, both companies and workers are keen to retain a hybrid-working approach. Tellingly, more than half of UK workers who currently have the choice between remote or office-based working said they would consider leaving their workplace if the company removed the hybrid option.

While hybrid working has many benefits, including increased employee productivity and happiness, it comes with specific risks.

Employees using personal devices in workplaces, known as 'bring your own device' (BYOD), has become commonplace. BYOD offers greater flexibility to workers, increases workforce mobility and allows organisations to cut software licensing costs and hardware spending.

However, it also opens the doors to significant threats. For example, employees might have poorly configured or vulnerable applications installed on their personal devices, which could expose sensitive business data if exploited. Workers might also download various applications and files that could contain malware.

Home and public wi-fi networks also pose significant risks to people working away from the office. Corporate virtual private networks (VPNs) remain one of the most attractive targets to threat actors and a channel through which to launch wider attacks. To avoid falling victim to this type of attack, companies should focus on making their VPN more secure by leveraging a robust authentication mechanism, enhanced encryption and security protocols.

2. Supply-chain attacks could peak in 2022

Supply-chain attacks, where a hacker infiltrates your IT environment via an external provider, is becoming more common. As organisations have adopted more rigorous approaches to protect their systems from the inside, threat actors have shifted their focus towards softer targets within the supply chain. For example, attackers may choose to target a software, hardware or managed service provider if their security posture is perceived as less robust than their client base. In other words,



this type of attack targets the weakest link in a chain of trust. Sadly, supply-chain attacks can cause widespread and irreparable damage to both vendor and customer organisations.

Some security experts predict that supply-chain attacks will peak in 2022, leaving many businesses wondering what they can do to protect themselves. Luckily, there are several ways to increase your resilience towards supply-chain attacks, including establishing a cyber supply-chain risk management (C-SCRM) programme, collaborating closely with suppliers and extensively vetting vendors before signing contracts.

3. Ransomware attacks on the rise

Ransomware attacks have been making the headlines for the past few years, and the number of incidents continues to rise. As well as the costs of responding to any incidents, there are also legal liabilities to consider, and rebuilding systems or implementing new ones after an attack can also be very expensive. For example, the attack suffered by Redcar & Cleveland Council in 2020 was reported to have cost £10.4m for the system rebuild.

Ransomware attacks most commonly start with a phishing email containing malicious attachments. However, some aggressive forms of ransomware exploit security vulnerabilities to infiltrate computers without manipulating the behaviour of employees.

In 2022, housing providers will need to be vigilant towards ransomware attacks and implement best practices to protect against them. Remember, you should never pay the ransom; there's no guarantee you will regain access to your data and you're more likely to be targeted again in the future.

4. SaaS is a top target for phishing attacks

Phishing attacks are increasingly targeting software-as-a-service (SaaS) suppliers. SaaS tools are undoubtedly helpful to many housing providers, especially in today's hybrid working environment, because they offer solutions to anyone with internet access.

However, SaaS solutions can pose a significant security threat. For example, if a hacker successfully steals

SaaS login credentials during a phishing attack, they have immediate access to the account. Moreover, impersonation becomes more viable when users can authenticate from remote locations. Additionally, obtaining SaaS login credentials is often easier for hackers than other accounts. Why? Because these applications often ask end-users to reauthenticate themselves, a rogue request for login credentials often doesn't raise suspicions.

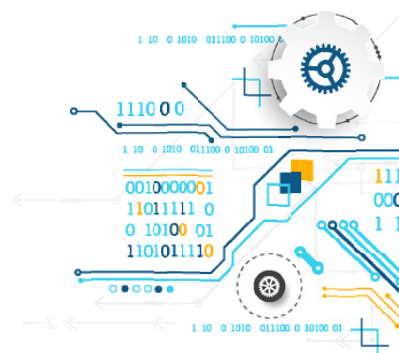
5. The cyber-security skills shortage

While companies have been aware of the cyber-security skills shortage for several years, the situation continues to worsen in 2022. A recent report found that the UK's cyber-skills shortage has grown by over a third in just the past 12 months. Moreover, the skills shortage is even more profound in the world of operational technology (OT) security.

Housing providers will find it even more challenging to hire highly-skilled information security staff in 2022. However, that doesn't mean businesses are left powerless and have to fend for themselves. The industry continues to respond to this problem with solutions that help bridge the skills gap. For example, companies are increasingly opting for robust automation tools that perform many of the tasks of IT workers. Additionally, IT managed service providers offering virtual CISO services are becoming increasingly popular for companies struggling to fill their cyber-security vacancies.

Rowan Troy is a senior cyber-security consultant at Littlefish.

littlefish
managed IT services





Cyber-risk management & AI-enabled domestic life

Dr. Manos Panaousis, Cyber Risk Lab (Internet of Things & Security Centre), University of Greenwich

This article is based on work from the CHAI project, which explores how individuals living in social housing can recognise and protect themselves against the potential cyber-security risks of AI-enabled smart technologies in their homes. Project CHAI is a three-year, EPSRC-funded project involving five UK universities in collaboration with Housing Technology.

Enriching our daily lives with smart applications & IoT

AI-enabled technologies are actively used in smart homes to provide intelligent services and recommendations while IoT coupled with AI concepts has been applied to home environments.

These modern technologies help us with daily activities and can improve our lives, such as entertainment, effortless measurement of our energy consumption, personalised heating adjustments using smart thermostats and smart radiator valves, motion detection, facial recognition for entering the house and buildings, and smart speakers. The ever-growing use of IoT devices and intelligent technologies has resulted in our home computer networks being filled up with devices and applications that gather and share sensitive information and occupants' activities.

In Project CHAI, we study the different smart applications that a smart home could deploy and the types of AI functionalities they exhibit, with the aim of developing a

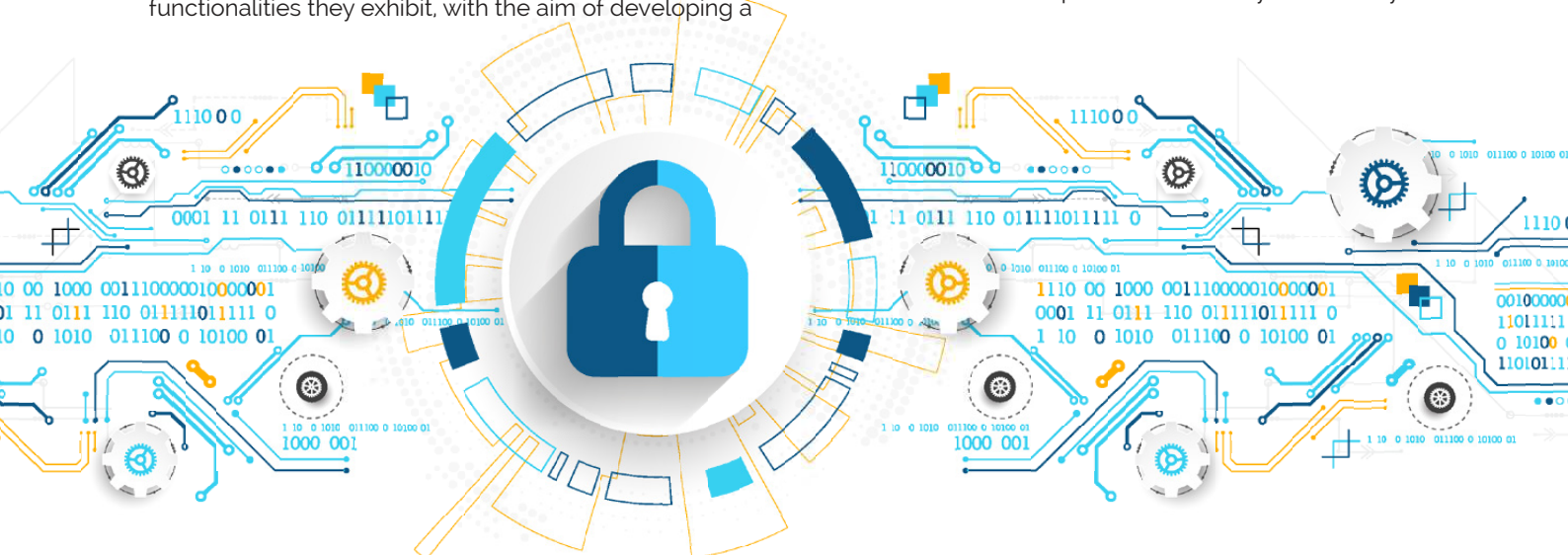
proof-of-concept smart energy device to demonstrate user 'explain-ability' features and support tenants with daily decisions about securely using their devices and applications.

Our homes as cyber-attack targets

Notwithstanding the benefits of these smart technologies, UK households have sadly become lucrative targets for exploitation by cyber criminals. Their aim is not simply tenants' assets such as stealing user data (money, personal documents, photos, etc), accessing cameras and hijacking smart/voice assistants but also threatening corporate networks which have become more accessible given the proliferation of home working since the pandemic.

Due to the complex nature and variety of smart home devices as well as the snarl of data and information sent among them, which constitute part of tenants' lives and daily routines, protecting smart homes is a challenging task.

Research in the context of user awareness has shown that smart-home occupants often lack cyber-security



awareness, even when it comes to frequently-used technologies such as social media and email. To manage cyber-security risks, smart homes must be equipped with adequate cyber-security measures.

At Project CHAI, we are creating an exhaustive list of cyber attacks and their potential impact on today's smart homes. We also explain how AI functionalities can be used against tenants in multiple ways. This is a critical step towards defining ways to not only secure the home by using specialised devices and applications but also educate the occupants on how to secure their smart devices against attacks.

Securing smart homes & managing cyber risk

Because coping with cyber-security challenges isn't a straightforward task, the UK government has published various resources, which can be helpful to mitigate cyber risks and maintain secure households throughout the country.

For example, the National Cyber Security Centre has provided useful tips and resources to help remote home workers to work securely. Their main tips include keeping our devices updated with the latest software, using strong passwords for our accounts and devices, using approved software and collaboration tools, using some software to detect and eliminate malicious software, securing our wi-fi networks and backing up our data.

Nevertheless, the aforementioned tips are 'merely' traditional security practices and only provide a first line of defence, while cyber criminals are improving their techniques to exploit new system weaknesses, conduct social engineering aiming (for example) to persuade users to click on fraudulent links or run viruses, and compromise service providers to gain access to home devices.

Project CHAI designs and assesses novel ways to mitigate cyber risks by studying a broad range of security methods for both service/application providers and smart-home occupants. The goal is to find the best combination of actions that tenants can take to secure their homes in cost-efficient ways. We go beyond just undertaking research and create a security game that tenants can play to educate themselves about the best ways to contribute to the fight against cyber attacks.

The Cyber Risk Lab at the University of Greenwich is actively looking for research partnerships with tenants, housing associations and technology providers. To learn more about our research plans and to get involved, please email me at e.panaousis@greenwich.ac.uk.

Dr. Manos Panaousis works in the Cyber Risk Lab (Internet of Things & Security Centre) at the University of Greenwich.



The latest interviews, demos and presentations



All the sessions that were broadcast live from our presentation rooms have been recorded and are available on our On Demand streaming platform.



On Demand membership is free for housing providers; if you've not signed up yet, you can do so now at ondemand.housing-technology.com.



Cyber attacks – Bridging the skills gap

Jonathan Lee, Director of Public Sector Relations, Sophos

Without the rapid adoption of digital strategies, it's difficult to imagine how housing providers would have coped during the pandemic. In a matter of weeks, committed and passionate IT teams rose to the challenge of accelerating the pace of digital transformation across estates, enabling remote working and expanding online service delivery. Unfortunately though, as I have written about before, increasingly sophisticated cyber criminals have capitalised on the fresh opportunities these changes in working practices have created.

There is no evidence that cyber criminals target the housing sector more than any other. All companies and organisations are considered fair game, from the largest corporations to the smallest charities. Sophos's report, 'The IT Security Team: 2021 and beyond', revealed that half the UK respondents thought that attacks are now too advanced for their organisation's IT team to deal with on their own, and in a 2021 IPSOS Mori report for the Department for Digital, Culture, Media and Sport (DCMS), 33 per cent of UK businesses said that they are 'not confident' in their ability to deal with a breach.

Housing vulnerabilities

There are reasons why housing providers are increasingly vulnerable. To start with, they hold a large amount of sensitive data about their tenants, such as their birth dates, bank and other financial details, benefits, caring responsibilities, NI numbers and information about their lifestyle and social circumstances.

Also, in the past two years, cyber criminals' tactics have shifted. Not only do they threaten to encrypt data and demand payment in return for decryption keys (ransomware), but increasingly they exfiltrate valuable personal data and threaten to publish or sell it on the dark web. Loss of data can lead to litigation and housing providers risk further financial losses as law firms take an increasing interest in supporting people who have suffered from a cyber breach.

IT constraints

In addition, due to budgetary constraints, housing providers often don't have large IT departments or in-house specialist resources to manage the constant stream of cyber threats. IT staff are often generalists tasked with implementing digital change, dealing with legacy systems, providing technical support, liaising with third-party providers and much more. However, cyber-security responsibility also lies with them. Therefore, it's no surprise that they might struggle to implement a robust cyber defence around the clock.

Yet, a lack of advanced cyber-security skills and resources within organisations doesn't mean that housing providers can't be kept safe from threats. While being a target of cyber criminals is a fact of life, being a victim isn't. So, what practical steps can your organisation take to keep itself secure?

Increase 'whole organisation' cyber awareness

Phishing attacks are often the entry point for cyber criminals: in 2019, Sophos reported that 41 per cent of IT professionals encounter them daily. And the DCMS

'Cyber Security Breaches Survey 2021' revealed that only 20 per cent of businesses and 14 per cent of charities had tested staff through mock phishing exercises. So, turn your employees into your first line of defence by reinforcing good cyber-hygiene practices and training them to recognise malicious behaviour through phishing simulations. Sophos's PhishThreat solution can help here.

Reduce your IT security workload

Too often, organisations buy security solutions, only for them to be too complex to use and configure, with these products frequently becoming 'shelfware'.

When purchasing cyber-security products, usability should be at the forefront in your mind. Is the solution easy to deploy and maintain and is it intuitive? Better-designed products reduce workloads, saving time and money and ultimately keep your organisation more secure.

Combine in-house and outsourced expertise

Even large and well-resourced businesses can struggle to understand the complexities of today's threat landscape. For example, in the 2021 DCMS report 'Cyber security skills in the UK labour market', a third of all organisations surveyed acknowledged that they had an advanced technical skills gap in areas such as penetration testing, forensic analysis and security architecture. Therefore, it is appealing for housing providers' stretched IT teams to

combine in-house and outsourced expertise by turning to services such as Sophos's Managed Threat Response (MTR).

MTR is a fully managed, 24/7 threat hunting, detection and remediation service which works alongside your IT staff as an extension of the team.

The security dream team

Our security professionals include analysts, engineers and ethical hackers from a variety of backgrounds, such as the armed forces, law enforcement, the intelligence community, and the public and private sectors. More than just a notification service, Sophos's MTR team can take targeted actions on your behalf, and because they are so familiar with malicious behaviours, breaches are often resolved within an hour.

As housing providers continue to reap the benefits of digital transformation, they must take stock and assess whether they have the right people, processes and products to stay resilient against today's advanced cyber threats.

Jonathan Lee is the director of public sector relations at Sophos.

SOPHOS
Cybersecurity evolved.

Skills and data limiting digital transformation – Futr

A lack of staff skills and quality data is holding back housing providers' digital transformation programmes, according to a survey from Futr.

More than half (54 per cent) of Futr's respondents said that a lack of digital skills and resources was their main barrier to digital transformation, followed by not enough good data and a lack of investment (32 per cent).

Kitty Hadaway, head of sales for housing, Futr, said, "90 per cent of the housing providers we spoke to said that it was very important for tenants to have choices in how they could contact their landlord, and that means complementing telephones with web, social media, chatbots and messaging channels. But to deliver that in a coherent, integrated and consistent manner requires many housing providers to digitally transform themselves."

It wasn't only tenants demanding digital means of communication; 90 per cent of housing providers said that their staff were also pushing for more omni-channel services.

Hadaway said, "Some people will say that new technologies mean cutting jobs, but forward-thinking organisations will always see it as a way to augment their teams, not scale them back.

"When a lack of skills is a major concern, being able to introduce new services that help staff do their jobs or focus on more complex problems can help accelerate digital transformation while improving employee engagement."

Aico launches Housing Safety & Wellbeing Taskforce



Aico has launched its Housing Safety & Wellbeing Taskforce, which owing to the pandemic, took place online. The fire-safety specialists were joined by Sir Peter Bottomley MP, who introduced the initiative and paid tribute to the late Sir David Amess MP, who had given Aico valuable support during the original planning phase of the project.

The Housing Safety & Wellbeing Taskforce will bring together partners from the public, private and charitable sectors across the UK to discuss the key issues involved in creating safer homes and making recommendations for action. The taskforce will be strictly non-commercial and non-partisan, committed to promoting a holistic approach to housing safety and residents' wellbeing.

The taskforce will focus on six areas: health and wellbeing; net zero & decarbonisation; resident engagement; housing quality; fire and carbon monoxide safety; and fuel poverty.

Each of the above areas has its own 'ambassador' to lead discussions and co-ordinate activities, drawn from the housing, fire service and academic sectors. The ambassadors will be actively encouraging participation from any interested parties; please visit our website to find out more and get in touch if you would like to be involved: hswtaskforce.org.uk.

Paul Dockerill, director of energy and programme manager at WHG and 'resident engagement' ambassador for the Housing Safety & Wellbeing Taskforce, said, "We need to work with our customers and create a culture where residents can raise any concerns and feel empowered to contribute to the future of their homes and communities.

"The taskforce is a really exciting initiative that will help us do just that, bringing housing providers and their customers together so that we can deliver the resident engagement strategies outlined in the government's social white paper."

Since the advent of devolution over 20 years ago, domestic fire safety regulation has varied considerably across the four nations of the UK, with Scotland's legislation now set to become the most stringent with the introduction of new standards this year. There is considerable divergence across the UK in terms of requirements for sprinkler systems, carbon monoxide detectors, and other safety measures for domestic properties.

At the launch event, the Housing Safety & Wellbeing Taskforce unveiled new research from CEBR (Centre for Economics & Business Research) that combined a statistical analysis of fire incidences across the UK, a summary of the relevant legislation, and a holistic examination of the human and economic impact of fire, based on official data and a specially commissioned YouGov survey.

The study looked into recent dwelling fires and demonstrated that the rate of reduction in fire incidents, running in tandem with new regulations, has slowed in recent years. With estimated annual costs of residential fires now exceeding £1bn, the research then goes on to examine in detail the potential impact and cost savings associated with tighter restrictions.

Tina Mistry, relationships manager at Aico and co-ordinator for the Housing Safety & Wellbeing Taskforce, said, "Given the trends highlighted by CEBR's research, the taskforce will hit the ground running to discuss the implications of the data and potential actions as a result."



PROMOTE YOUR JOB VACANCIES AND REACH HIGH-CALIBRE CANDIDATES WITH HOUSING TECHNOLOGY

- Dedicated job board for the housing sector
- 100% free for housing providers
- Post your vacancies on our easy-to-use website in a matter of minutes
- Receive applications directly from our large audience
- Housing providers feature in our monthly jobs email which is sent to 1000+ key professionals in the sector

**POST YOUR
VACANCIES TODAY**

VISIT

jobs.housing-technology.com

EMAIL

recruitment@housing-technology.com

TELEPHONE

0208 336 2293

**OUR 2022 RECRUITMENT
BUSINESS PARTNER****Lioness.**

With almost 20 years' experience recruiting for social housing technology and IT roles, we know the kind of talent businesses are looking for – and where we can help them look.

We recruit for permanent, fixed-term salaried roles and contract positions. We use our unique network of connections across social housing and local authorities, facilities management, charities, sector-specific consultancies and specialist software houses.

FEATURED JOBS**Housing Systems
Project Manager**

Remote

£450 - £550 daily

**Functional
Consultant**

Remote

£45,000 - £65,000 pa

**Rents Implementation
Consultant**

Remote

£45,000 - £55,000 pa

Find out more about these vacancies and apply at
jobs.housing-technology.com

Paperless tenancies

How feasible and useful is it for housing providers to move to a 100% digital tenant lifecycle, from initial application and onboarding to tenant engagement, finance and payments, and maintenance and support, through to renewals, voids and re-lettings? Housing Technology asked digital experts from Civica, Commonplace, Insite Energy, M-Files and NEC Software Solutions for their views.

Beyond electronic onboarding

In Housing Technology's view, paperless tenancies go beyond 'mere' digital tenancy documentation and electronic onboarding and should span each tenant's entire lifecycle with their landlord. There will naturally be some exceptions to this in the case of, say, the possible legal requirement to file paper-based tenancy agreements and vulnerable and/or digitally-excluded tenants.

Paul Berry, head of product management for housing at Civica, said, "Paperless tenancies are all about delivering digital services to customers. They relate to the tenant's entire journey, from initial onboarding, tenancy management and post-tenancy activities all being available and served digitally."

Benjy Meyer, vice president for product and technology at Commonplace, said, "When it comes to engaging with tenants throughout the life of their occupancy, we see a combination of functional and emotional touchpoints.

"Typically, the more functional end of tenant-landlord relationships concerns managing leases, rent payments, safety records, maintenance requests and follow-up, energy use monitoring and more, while the more emotional touchpoints relate to areas such as community events, wellbeing, antisocial behaviour and tenants' associations.

"Paperless' suggests making things more efficient and at a lower cost. For us, going paperless is really about designing more relevant, more personal and more human interactions. It's easy to conclude that 'paperless = faceless', but digital is very effective at supporting both face-to-face interactions (in conjunction with housing officers' mobile devices) and remote interactions.



Paperless tenancies suggest making things more efficient and at a lower cost, but going paperless is really about designing more relevant, more personal and more human interactions.

Benjy Meyer, VP Product & Technology,
Commonplace



The beauty of digital is that every touchpoint can be personalised to the individual or household at low cost."

Barriers to paperless tenancies

Trevor Hampton, director of housing at NEC Software Solutions UK, said, "The potential barriers to paperless tenancies include whether the housing provider has digitised all of their contracts and tenancy information through to having the necessary governance with their legal teams. For tenants, it really comes down to their individual access to digital tools and knowledge; do they have a smartphone or equivalent technology and how comfortable are they with using it?"

Colin Dean, director of Western Europe for M-Files, said, "To give tenants the best possible service, housing providers must guarantee that their information and documents are easily accessible and secure. Doing so in a paper-based world isn't just tricky, it's often impossible.

"Transitioning to a completely paperless office isn't something that happens overnight but it is possible in the long term. Understanding why it's important to start going paperless in the first place is the first barrier of entry."

Civica's Berry said, "There are challenges around transforming complex housing processes into a



frictionless customer experience, particularly where a housing provider's existing application landscape isn't fully digital.

"The other side to this for tenants can be feelings of confusion and disjointedness where processes aren't as clear or as seamless as expected, particularly when compared with their day-to-day consumer experience of digital. There can also be need-driven barriers where tenants can't access digital services, with similar-quality alternatives required to avoid dual standards of customer service."

Commonplace's Meyer said, "Every tenant has a different experience of their tenancy; there are clear milestones at the start and end of each tenancy, but the parts in the middle are too often forgotten. These can be the more emotional touchpoints around health and wellbeing, social cohesion, safeguarding vulnerable people, sharing news about local jobs and so on. Delivering a strong digital experience between the frantic start and end of a tenancy is therefore so important to sustaining long-term tenancies."



Paperless tenancies can support good relationships by providing an excellent digital service but the human element of person-to-person support and interaction mustn't get lost in the process.

Paul Berry, Head of Product Management for Housing, Civica

Anna Machell, head of onboarding at Insite Energy, said, "For tenants using our app, their entire journey with us takes place online. This goes from a welcome email and link to a scheme-specific microsite at the start of the tenancy, access to our app to track their consumption and account balance throughout their tenancy, through to web-based moving-out forms."

Business and IT changes

Civica's Berry said, "You need a strong focus on transformation and cultural change to become digital by default and support paperless tenancies. This can be done incrementally by focusing on the customer journey



Paperless tenancies significantly reduce the administrative burden for housing providers because tenants can self-serve far more.

Anna Machell, Head of Onboarding, Insite Energy

at clearly-defined stages, such as onboarding. The specific benefits can then be gained as well as the pitfalls understood before extending the programme further or including more services."

NEC's Hampton said, "It depends whether a housing provider has invested in electronic document management systems (EDMS) with effective workflows so that documents with the right information are sent at the right time to the right person and in the right format.

"Moving to paperless tenancies can be a difficult process – not necessarily from an IT perspective but a cultural one. Many employees and tenants can take a while to warm to the idea of going paperless; good stakeholder management always goes hand-in-hand with effective IT implementations."

Commonplace's Meyer said, "Going paperless can involve using multiple online platforms. The SaaS revolution has resulted in a plethora of products specialising in different aspects of tenant relationships. A key feature of SaaS software is its portability, accessibility and ease of use, with the potential to decentralise many aspects of the tenant-landlord relationship while still providing data that can be collated and shared with other business applications."

M-Files' Dean said, "While information management platforms are easy to implement and usually work from the first launch, housing providers must also try to put their employees at ease, so training may be needed to give staff the confidence to use the platform to the best of their abilities."

Benefits to housing providers

Civica's Berry said, "Paperless tenancies help housing providers to deliver services to tenants more efficiently, freeing staff time to focus on other more complex interactions and value-adding tasks. Intelligent automation



Creating, sending and signing leases can be done online within minutes; housing providers can fill empty properties sooner and tenants can secure their home faster.

Colin Dean, Director for Western Europe, M-Files

should drive the relevant processes to the right people at the right time as well as removing administrative overheads."

Insite Energy's Machell said, "Paperless tenancies dramatically reduce the administrative burden for housing providers because tenants can self-serve far more. Paperless tenancies also provide better audit trails because housing providers will have electronic copies of everything they need."

NEC's Hampton said, "The pandemic demonstrated the value of paperless tenancies because everything had to move online when access to tenants and properties was severely limited. Now is the time to take advantage of the new ways of working because there is the ongoing problem of providing services with reduced staffing."

Happier tenants

Commonplace's Meyer said, "Creating a digitally-led experience helps not only with administrative tasks but it can also create a much richer experience for tenants during their tenancies. And those same digitally-led methods can help with offboarding; having a single portal to sort out all the hassle of moving out creates a much smoother process for both tenants and housing providers."

Civica's Berry said, "Tenants benefit from easier access to services which are available at a time to suit them, plus all interactions are more seamless and provide a richer experience."

M-Files' Dean said, "Creating, sending and signing leases can be accomplished online within minutes. Housing providers can fill empty properties sooner, and tenants can secure their home faster."

The importance of face-to-face contact

NEC's Hampton said, "Although there are many benefits to going digital, an important thing to be aware of is the need to maintain the human touch."

"Face-to-face contact is a vital part of social housing and can't be easily replaced. It's all about building trust and the situational experience which can't be done remotely. As an example, for a vulnerable person moving house can be a traumatic experience so having someone to meet you and make sure everything is set up can be reassuring and can help to build a strong relationship."



Face-to-face contact is a vital part of social housing and can't be easily replaced; it's all about building trust and the situational experience which can't be done remotely.

Trevor Hampton, Director of Housing, NEC Software Solutions UK

Civica's Berry said, "Tenancies are ultimately about people and their homes, with an important part of this being tenants' relationships with their housing providers. Paperless tenancies can support a good relationship by providing an excellent digital service but the human element of person-to-person support and interaction shouldn't get lost in the process."

Housing Technology would like to thank Paul Berry (Civica), Benjy Meyer (Commonplace), Anna Machell (Insite Energy), Colin Dean (M-Files) and Trevor Hampton (NEC Software Solutions UK) for their comments and editorial contributions to this article.

Xmap's cloud-based GIS comes to housing



Geosphere's Xmap is a native cloud-based web application that can be accessed from any web-enabled device, without plug-ins, bolt-ons or additional installations.

In addition to a suite of services specifically designed for housing and local government users, Xmap also supports joined-up governance by making it easy for housing providers and local authorities to share GIS data between same-tier organisations for shared-service applications and between tiers for the delivery of powers and duties at a community level.

Chris Mewse, managing director, Geosphere, said, "Despite significant achievements over the past two years, seamless remote working still has its challenges when it comes to geospatial services and applications. Not limited to broadband speed, these can include slow local hardware, slow support from IT contractors and the use of VPNs. Xmap overcomes those barriers via an easy-to-use, easy-to-consume, GIS service that can be accessed through any web browser."

As a true cloud-based solution for accessing, manipulating and sharing geospatial data, Xmap already has over 4,000 daily users. Xmap supports remote working by removing barriers including unlimited usage, encrypted and secure data storage, and integration with other services such as EDRM software, planning portals and open-source GIS.

Ashley Crow, GIS officer, North East Derbyshire District Council, said, "Using Xmap Cloud GIS has transformed our use and application of GIS. We now have over 250 users with access to over 500 mapping datasets."

"XMAP has helped us streamline our GIS data management, ensuring our users get the correct, up-to-date information. This shift away from traditional desktop GIS has saved money and increased the usability of GIS data."

Peabody CEO joins NEC Software Solutions

NEC Software Solutions has appointed Brendan Sarsfield, CEO of Peabody until his retirement from the housing provider last summer, as a strategic advisor.

Roger Birkinshaw, executive director for government and housing, NEC Software Solutions, said, "We're committed to understanding the shifting issues and requirements for social housing and finding the best ways to solve them. Brendan's career has been dedicated to social housing and has a great track

record of championing social purpose and delivering improved social housing."

Brendan Sarsfield,

strategic advisor, NEC Software Solutions, said, "There are many challenges for housing providers to navigate, from managing risk to achieving carbon neutral operations, which mean they need IT systems to up their game."

"Historically, the housing sector has underinvested in technology so it has been good to see NEC Group investing almost £100 million in developing its products and services."



Brendan Sarsfield,
Strategic Advisor,
NEC Software
Solutions

HOUSING TECHNOLOGY 2022 IN REVIEW

**HOUSINGTM
TECHNOLOGY**
2022 | CONFERENCE AND
EXECUTIVE FORUM



**HOUSING
TECHNOLOGY**
ON DEMAND

George Grant
CEO, Broadcaster,
Publisher & Founder
Housing Technology

BACK TOGETHER AGAIN

This year's Housing Technology annual conference (2-3 March) was very special because we were back in-person at The Oxford Belfry once again and also broadcasting live to our digital audience. Our last in-person conference in 2020 was the last business/IT event most of our community attended just before we went into lockdown.

Over 500 people attended in-person and online for our digital broadcast. It was a wonderful feeling to be together again and most of the feedback that we've received confirms that our guests felt the same.

Featuring over 35 sessions from leading housing providers and selected IT suppliers as well as two special keynotes, the conference provided key insights, knowledge sharing and networking opportunities.

SENSATIONAL SPEAKERS

With a jam-packed agenda, some of the housing providers presenting included BPHA, CHP, Halton Housing, Link Group, MHA, Optivo, Orbit Group, Places For People, Raven Housing, Rooftop Housing, Royal Borough of Kensington & Chelsea, Vivid Homes, Wrekin Housing and Yorkshire Housing.

We welcomed back Andrew Grill, The Actionable Futurist, who opened the first day of the conference with his keynote 'Joining the dots with connected housing' with some fascinating insights and predictions for the future, and the injunction for us all to be 'digitally curious'.

On day two, BBC broadcaster and writer Timandra Harkness opened with her thought-provoking keynote, 'What can data do for you (and what can't it do)?'. We provided free copies of Timandra's book, 'Big Data: Does Size Matter?', to attendees which she signed on the day; I've listened to the audiobook, narrated by the author, and can assure you that it's a fantastic read/listen.

We hosted a pre-event get-together and an evening reception at the end of day one (including two outstanding close-up magicians); catching up with familiar faces and meeting new ones in-person was a real highlight and I know many of you felt the same... it's been a long two years!

A BIG THANK YOU

I am very grateful to all our guests, speakers, staff, film crew, tech team, venue and hospitality staff, and sponsors who were involved during the two days.

Our sponsors showcased their solutions and services in our exhibition hall which was a hive of activity throughout the event. Our sponsors were: Aareon UK, Active Housing, Aico, Amido, Capita, Civica, Crimson, Esuasive, FLS – Fast Lean Smart, FireAngel Safety Technology, Housing Insight, Itica, Kick ICT, Lima, Lioness Recruitment, Littlefish, Manifest Software Solutions, MIS Active Management Systems, Mobyssoft, NEC, Neo Technology, Optus Homes, RedkiteCRM, Social Telecoms, Sophos, TechLabs London and TSG.

ACCESSING THE SESSIONS ON DEMAND

All the sessions that were broadcast live from our presentation rooms have been recorded and will be available very shortly on our On Demand streaming platform.

Housing Technology On Demand launched last year and it's been going from strength to strength as we have published exclusive interviews, demos, case studies, event replays (including the 2021 digital conference recordings) and more over the past year. Visit ondemand.housing-technology.com to find out more and once you've signed up (free to housing providers, local authorities and other end-user organisations), you can download our app which is freely available for iOS and Android devices.

COMING UP NEXT

We have more events coming up this year including our **#HousingTechLive** sessions and 'Data Matters 2022', our one-day autumn event later this year.

We are also already planning next year's conference, our 14th annual event. **Housing Technology 2023** will be going ahead in March next year; stay tuned for more details soon.

In terms of Housing Technology's publications, we have the magazine bringing you the latest news, insights and thought leadership, as well as new guides and reports. If you haven't subscribed already, make sure you do so at housing-technology.com to receive our updates.

We're very much looking forward to seeing many more of you face-to-face and virtually at our events this year and next... onwards and upwards!





Thirteen gains ISO status

Thirteen Group has gained ISO27001 accreditation for its information management and data security processes and activities.



Hassan Bahrani,
Head of IT,
Thirteen Group

ISO27001 is the international standard for information security and risk. It assesses the systems and processes that organisations

assessors met with staff from teams across Thirteen's operations to understand how the housing provider manages its information.

The ISO/IEC 27001 auditor from SGS said, "I was very impressed with Thirteen's systems, in particular its automation, how its systems are used and good practice within its project management governance. There was great use of automated workflows and the overall information security system was of a high standard, so ISO/IEC 27001 certification is recommended."

have to manage and improve how information and data is kept secure.

Hassan Bahrani, head of IT, Thirteen Group, said, "Applying for ISO27001 was a really rigorous process that involved people from across Thirteen. We store a wide variety of data, which includes very sensitive information about customers and other people we work with. So it's essential that we have robust systems and processes to keep that data safe."

To assess its progress, Thirteen asked assessors from SGS-UK to audit its processes and systems. The

Hassan said, "It's vital we have this accreditation because it confirms that we have the right systems and policies to protect the data we manage. This will help us retain some important contracts and gives us the opportunity to bid for new work in the future."

In addition to the management of its information, the SGS assessors also looked at security measures for Thirteen's buildings and facilities, HR processes, communications and purchasing practices.

Housing Technology Guides to HMS and Connected Homes



Following the success of Housing Technology's series of guides to artificial intelligence, omni-channel and CRM, finance and procurement, and business intelligence in social housing, we are about to start the research and production for our two new guides to housing management systems and connected homes.

The Housing Technology guide to 'connected homes', supported by FireAngel, will focus on how housing providers and local authorities can use networks of IoT devices across their property portfolios to gather data to support their ongoing operations and strategic planning. Moving beyond the tactical use of IoT device data by individual tenants, the guide will cover how housing providers and LAs can aggregate torrents of IoT data and turn it into meaningful insights.

The Housing Technology guide to housing management systems, supported by Aareon UK, will cover the rationale behind HMS replacements, the alternatives to 'traditional' HMS

in the form of ERP systems and new cloud-based 'disruptors', what to look for during HMS procurement activities, and the business, IT and cultural changes inherent in HMS migration projects.

If you are interested in contributing an article to either/ both of the guides, please get in touch with Alastair Tweedie (editor & co-founder, Housing Technology) at alastair@housing-technology.com.



Housing Technology Wellbeing is a free community resource on our recruitment website where we will be posting regular insights into workplace wellbeing, careers and skills.

GET IN TOUCH

If you have any thoughts, experiences, news, case studies or advice on workplace wellbeing, we'd love to hear from you.

Find out more at jobs.housing-technology.com/wellbeing or get in touch at wellbeing@housing-technology.com.

Alternatively, call us on: 020 8336 2293